RRs Blueprint
Featherbed Fight

November 2, 1959

RAILWAY AGE *weekly*

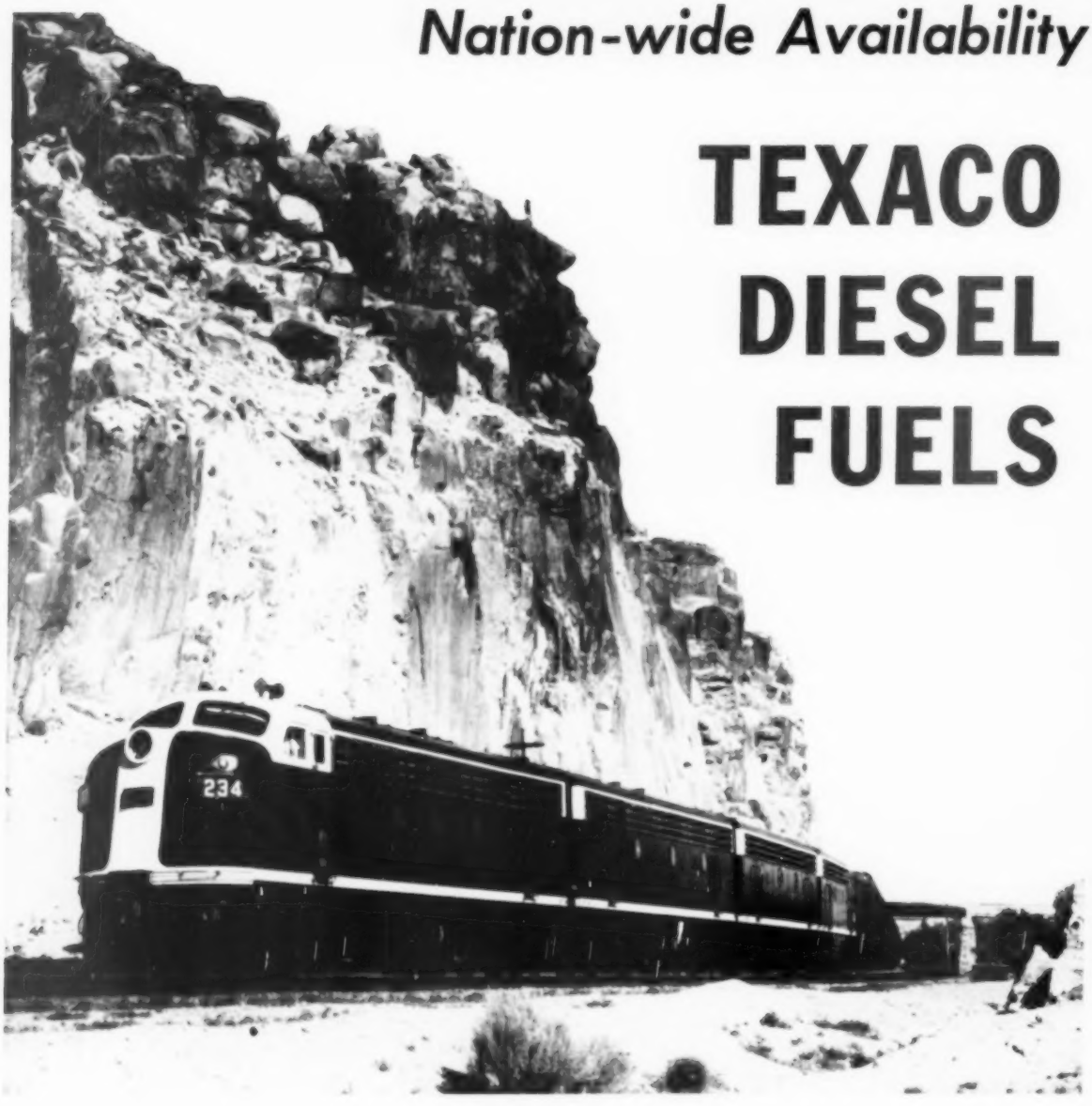
Canada's Railroads

Canada gives its railroads the freedom they need to grow—It's a pattern U. S. lines can try to win for themselves

60 cents A Simmons-Boardman TIME-SAVER Publication

Nation-wide Availability

TEXACO DIESEL FUELS



CHECK these two important advantages in using Texaco Diesel Fuels:

FIRST: You can get the Texaco Diesel Fuels you need through any one of more than 100 tank car loading plants strategically located throughout the United States.

SECOND: There is a complete line of Texaco Diesel Fuels—for all sizes, types and makes of diesel engines, whether used in locomotives, maintenance-of-way or construction equipment.

Texaco Systematic Engineering Service—available coast to coast—will gladly help you select the proper fuels, as well as lubricants, for your diesel engines.

Just call the nearest Railway Sales Office in New York, Chicago, San Francisco, St. Paul, St. Louis or Atlanta. Texaco Inc., *Railway Sales Division*, 135 East 42nd Street, New York 17, N. Y.

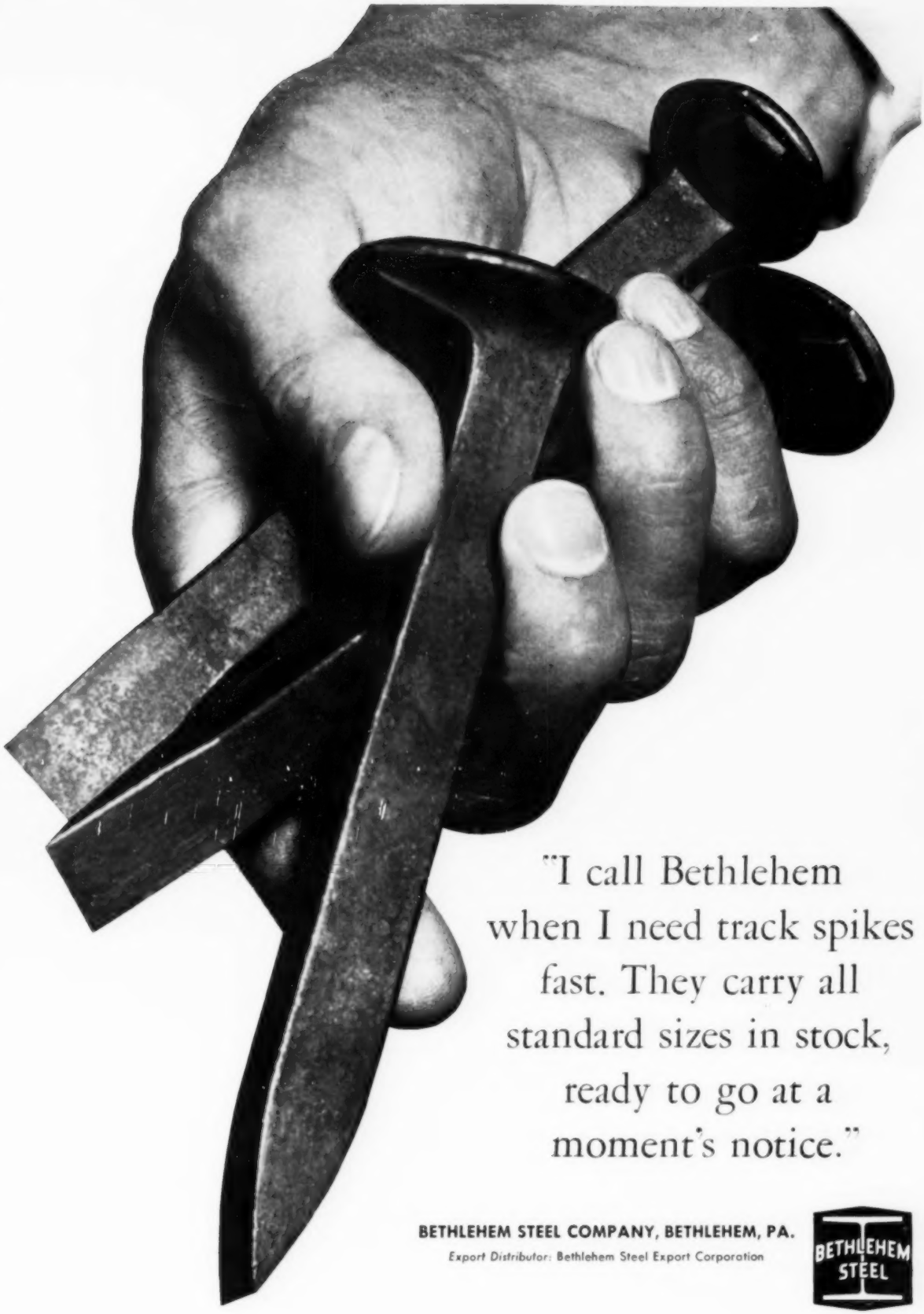
Tune In: Texaco Huntley-Brinkley Report, Mon.-Fri.-NBC-TV

TEXACO

Throughout the United States

Canada • Latin America • West Africa

RAILROAD LUBRICANTS AND SYSTEMATIC ENGINEERING SERVICE



"I call Bethlehem when I need track spikes fast. They carry all standard sizes in stock, ready to go at a moment's notice."

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

Export Distributor: Bethlehem Steel Export Corporation

BETHLEHEM STEEL

Southern Pacific Company, Tucson, Arizona. Photo courtesy of Tucson Daily Citizen.

1,400 Miles to be controlled by new Union Traffic Control Centers

Since the new Union Traffic Control Center was introduced over a year ago, eight railroads have ordered or put into operation 12 TCC machines controlling 1,400 miles of railroad.

These railroads have realized the advantages of Union Switch & Signal's Traffic Control Centers.

With Union Traffic Control Centers, railroads can consolidate the control of CTC in strategic locations and ultimately control an entire railroad from one central point.

A TCC unit takes up much less space than a lever type machine. And it's flexible. A 9-foot basic machine can easily be expanded vertically and horizontally to accommodate additional track diagram modular units. TCC can be applied to all types of interlockings, as well as to CTC. TCC can be used with any existing control system.

Contact your nearest Union Switch & Signal office or representative for full details about TCC.

"Pioneers in Push-Button Science"

UNION SWITCH & SIGNAL

DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY

SWISSVALE, PENNSYLVANIA

NEW YORK . . . . PITTSBURGH . . . . CHICAGO . . . . SAN FRANCISCO

RAILWAY AGE *weekly* November 2, 1959 • Vol. 147, No. 18

Week at a Glance

Departments

Editors Afield 49
Freight Car Loadings 55
Letters from Readers 50
New Equipment 55
New Products Report 42
People in the News 58
Railroading After Hours 43
Railway Market 58
The Action Page 62
Watching Washington 10
You Ought to Know 60

• Editorial and Executive Offices
New York 7, 30 Church St.

JAMES G. LYNE, Editor
ROBERT G. LEWIS, Publisher
Executive Editor .... Joe W. Kizzia
Managing Editor .... Fred C. Miles
News Editor ..... Luther S. Miller
Traffic-Transportation .. G. C. Hudson
Mechanical
C. L. Combes F. N. Houser, Jr.
Signaling & Communications
Robert W. McKnight Robert J. Barber
Associate Editors
Rod Craib Harry M. Grayson, Jr.
Librarian ..... Edith C. Stone
Editorial Assistant .... June Meyer
Art Director.....Russell S. Rypsam
Design and Layout .. Joel Petrower
Production Manager..Joseph J. Menkes

• Chicago 3, 79 West Monroe St.
Western Editor ..... Gus Welty
Mechanical .... Norman E. Gillespie
Engineering ..... M. H. Dick
R. E. Dove E. W. Hodgkins, Jr.
Purchasing & Stores ..... Bert Enos
Editorial Assistant .. Wanda Brown

• Washington 4, National Press Bldg.
Washington Editor .. Walter J. Taft

Railway Age, established in 1856, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.

Published weekly by the Simmons-Boardman Publishing Corporation at 440 Boston Post Road, Orange, Conn. Second-class postage paid at the Post Office at Orange, Conn. James G. Lyne, chairman of the board; Arthur J. McGinnis, president and treasurer; Duane C. Salisbury, executive vice-president; George Dusenbury, vice-president and editorial and promotion director; Robert G. Lewis, Joe W. Kizzia, M. H. Dick, M. J. Figa, R. C. Van Ness, vice-presidents.

RRs ask 6 basic rules changes ..... p. 9

Management's proposals for ending featherbedding waste include demands for a 160-mile "basic day" for certain locomotive and freight-train crewmen—and the right to operate road freight and yard diesels without firemen. (Complete text of the railroad proposals begins on p. 16)

Symes, Greenough move up on PRR p.10

Effective Nov. 1, James M. Symes is the PRR's chairman and chief executive officer. He is succeeded as president by Allen J. Greenough, whose duties will include those of chief administrative officer.

Trailer Train grows in South p.13

ACL, SAL, IC and GM&O are new members of the piggyback-car-leasing pool, bringing membership up to 18 railroads and one freight forwarder. In announcing Trailer Train membership, the four roads outlined plans for expanding piggyback service between the South and East Coast points and the South and the Midwest.

CANADA'S RAILROADS ..... p. 18

A growing country with expanding railroads—that's the story of modern Canada. The rail lines that serve the nation enjoy many freedoms that U. S. lines could use, too. The special report in this issue—and the Action Page (p. 62)—analyze the whole Canadian operation, describing the freedoms and the handicaps, and tell why, in many respects, the Canadian railways are world leaders.

Short and Significant

Steel shortages have shut down PRR's Altoona shops . . .

with only 7,500 of the 11,800 cars on order as Altoona's share of Pennsy's 23,500-car program completed. Inventories accumulated prior to the steel strike had kept production going up to this point. About 3,500 employees will be furloughed in two Altoona shops: Samuel Rae Shops at Hollidaysburg and the 2nd Street Shops. Steel shortages have already affected production of the 11,700 cars being built by other car builders, only about 4,000 of which have been received and put in service. Altoona is expected to resume production about four weeks after the steel strike ends.

MINER

Class A-22-XL Friction Draft Gear

In Canada—in the United States—everywhere—you will find the A-22-XL Gear providing full and lasting protection for every type of rolling stock.

W. H. MINER, INC. · CHICAGO

CANADIAN RAILWAY PRODUCTS CO., LTD. · MONTREAL

Week at a Glance cont

Current Statistics

Operating revenues	
8 mos., 1959	$6,621,918,760
8 mos., 1958	6,164,653,199
Operating expenses	
8 mos., 1959	5,191,899,748
8 mos., 1958	4,983,068,163
Taxes	
8 mos., 1959	711,116,463
8 mos., 1958	589,523,718
Net railway operating income	
8 mos., 1959	502,889,206
8 mos., 1958	393,702,713
Net income estimated	
8 mos., 1959	365,000,000
8 mos., 1958	286,000,000
Average price railroad stocks	
Oct. 27, 1959	104.86
Oct. 28, 1958	98.17
Carloadings revenue freight	
42 wks., '59	25,016,861
42 wks., '58	24,226,626
Freight cars on order	
Oct. 1, 1959	35,626
Oct. 1, 1958	24,982
Freight cars delivered	
9 mos., 1959	29,916
9 mos., 1958	34,664

●

Advertising Sales Department

Duane C. Salisbury—director of sales

New York 7, N. Y., 30 Church st., WOrth 4-3060
J. S. Vreeland—vice president; F. T. Baker—district manager; J. C. Lyddy; W. E. Glasby

Chicago 3, Ill., 79 W. Monroe st., RAndolph 6-0794
J. R. Thompson—vice president; J. W. Crossett—district manager; Hale Carey

Cleveland 15, Ohio, 1501 Euclid ave., MAin 1-4455
H. H. Melville—vice president; H. M. Blunt—district manager

Philadelphia, Pa., Jericho Manor, Jenkintown, Pa., TUrner 7-4526
W. E. Glasby—district manager

Pittsburgh 19, Pa., Suite 203, Carlton House GRant 1-8186
C. J. Fisher—district manager

Atlanta 9, Ga., 22 Eighth st., N. E., TRinity 2-6720—J. S. Crane

Dallas 19, Tex., 3908 Lemmon ave., LAkeside 2322—Joseph Sanders

Los Angeles 17, Cal., 1336 Wilshire blvd., HUbbard 3-0390
Blaine A. Sparks—vice president

San Francisco 11, Cal., 244 California st., EXbrook 7-4990
D. S. Clark—district manager

London E.C.1, Eng., 8/9 Clerkenwell Green Sibley-Field Publishing Co., Ltd.

Frankfort am Main (16), West Germany
Wittelsbacher Allee 60
Georg J. Linder, Continental European Representative

Tokyo, Japan
Shadan Hojin, 14
2-Chome Marunouchi
George E. Olcott

Subscription to railroad employees only in U.S. possessions, Canada and Mexico, $4 one year, $6 two years, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year. In other countries, $15 a year. Single copies 60¢ except special issues. Address all subscriptions, changes of address, and correspondence concerning them to: Subscription Dept., Railway Age, Emmett St., Bristol, Conn.

Circulation Dept.: R. C. Van Ness, Director of Circulation, 30 Church St., New York 7, N. Y. POSTMASTER—SEND FORM 3579 to EMMETT ST., BRISTOL, CONN.

Printed at the Wilson H. Lee Co., Orange, Conn

Union wage-increase demands . . .

and management wage-cut proposals got to the third-party stage last week as the National Mediation Board started talks in three disputes. Mediators met with carrier representatives and separately with bargaining representatives of the BLE, ORC&B and SUNA. Previously wage talks with the BRT had been held at the conference committee level and recessed. Last operating union to get into the picture was the BLF&E. Conference talks began last week.

Serviceable fleet of freight cars . . .

on Class I railroads is now down to about 1,550,000 cars, the lowest point in about 18½ years. It's down some 40,000 cars from a year ago. Latest AAR figures also show that September brought a net loss in ownership of 6,510 cars. Although 2,920 new and rebuilt cars were placed in service, the month's retirements totaled 9,430 cars.

Railroad tax payments under the RUIA . . .

will continue next year at a rate of 3¼% of taxable payroll —the maximum tax rate permitted by existing law. Under the Railroad Unemployment Insurance Act, the rate is determined by the balance in the account on Sept. 30. Maximum rate is chargeable when the balance falls below $300,000,000—and as of Sept. 30, 1959, the account showed a deficit of $27,800,000 and was being financed temporarily through loans from the railroad retirement account, as provided by law. Unemployment contributions are paid by employers only.

A race between an auto and a commuter train . . .

helped mark the first anniversary of Philadelphia's Operation Northwest, the PRR-Reading-city experiment in reducing fares and improving schedules to get commuters off the pavement and onto trains. Both train and auto left Chestnut Hill simultaneously. The auto, using the Schuylkill Expressway, reached Reading Terminal 19 minutes behind the train.

L&N's plan to acquire Interstate . . .

has been given overwhelming approval by L&N stockholders. Results of the balloting: 99.8% of shares voted favor the proposal. L&N had filed application with the ICC for authority to acquire Interstate Aug. 13, in opposition to a similar application filed earlier by the Southern (RA, June 1, p. 7; July 20, p. 56; Aug. 24, p. 29; Sept. 7, p. 13).

Southern Pacific stockholders . . .

have approved a proposal to triple the number of outstanding shares and to split the outstanding stock 3-for-1 (RA, Aug. 31, p. 60).

SPECIAL REPORT TO CATERPILLAR OWNERS

CAT CATERPILLAR

Parts you can trust.
Dependable round-the-clock service.

CATERPILLAR PARTS ASSEMBLY EXCHANGES LET YOU
TRADE DOWN TIME FOR MORE GO TIME

Here's news about the time-saving, money-saving plan offered by your Caterpillar Dealer. It works this way:

1. Place your order for a parts exchange assembly that is available from dealer stock.
2. Remove your worn assembly and install the reconditioned unit.
3. Send your machine back to work and return the worn unit for credit.

Do-it-yourself repairs to parts assemblies must be weighed against earning losses. What would your equipment earn for you *during the extra time* it takes to repair parts assemblies? You can eliminate earning losses of this type and still pay no premium. Your equipment can actually be making money for you, when otherwise it would be down.

Cat assembly exchange units are guaranteed by your Caterpillar Dealer and can be ready to go on just as soon as the worn assembly is off. The cost? The cost compares favorably with the actual cost had you done the repair work yourself—often less because of the availability of special equipment and serviceman's skill in your dealer's shops.

You can exchange with confidence. When you purchase a Caterpillar Exchange Assembly, you can be sure it's been reconditioned by trained experts using authorized techniques, and only *genuine* Caterpillar parts are used. Every assembly exchange item is backed 100% to be in first-class condition.

Any way you look at it, Cat Parts Assembly Exchange is a good deal. You get a dependable, guaranteed exchange unit at approximately the same cost had you done the job yourself—and the time saved can be converted into cash by having your machine working and earning. Contact your dealer today for his list of Parts Assembly Exchange Units and prices.

Caterpillar Tractor Co., Peoria, Illinois, U. S. A.

EQUIPMENT RENTAL AVERAGES DURING 1958*
as compiled by Associated Equipment Distributors

CRAWLERS	PER DAY DIRECT DRIVE	PER DAY TORQUE CONVERTER
D9	$296.00	$386.00
D9 w. No. 9A Dozer	367.00	457.00
D9 w. No. 491 Scraper	497.00	507.00
D8	211.00	330.00
D8 w. No. 8A Dozer	270.75	398.25
D8 w. No. 463 Scraper	366.00	485.00
D7	142.00	
D7 w. No. 7A Dozer	188.25	
D7 w. No. 435 Scraper	265.00	
D6	107.00	
D6 w. No. 6A Dozer	148.50	
D6 w. No. 60 Scraper	179.75	
D4	74.75	
D4 w. No. 4A Dozer	109.50	
D4 w. No. 40 Scraper	113.40	

MOTOR GRADERS	PER DAY
No. 14	$138.00
No. 14 w. Scarifier Attach.	149.00
No. 12	117.00
No. 12 w. Scarifier Attach.	125.75
No. 112	93.00
No. 112 w. Scarifier Attach.	110.85
WHEEL TRACTORS w 2-WHEEL SCRAPER	
DW21-No. 470	$382.00
DW20-No. 456	482.00
DW15-No. 428	205.00
TRACTOR LOADERS, FRONT END LOAD and DUMP	
No. 977	$199.00
No. 955	108.00
No. 933	85.75

*Figures are national average rates and in no way reflect the going rate in any area, and cannot be so used. Actual rental costs vary depending on local practices and conditions.

SERVICE TIP

BEFORE you begin to tear down your equipment to remove a parts assembly, check with your Caterpillar Dealer on availability and delivery. The big advantage of Parts Assembly Exchange is in having the reconditioned unit ready to go on as soon as the worn one is off.

CATERPILLAR

Caterpillar and Cat are Registered Trademarks of Caterpillar Tractor Co.

RRs Ask 6 Basic Rules Changes

► **The Story at a Glance: The railroads are serving the operating brotherhoods with demands for sweeping work-rule reforms.**

They're asking, among other things, for a 160-mile "basic day" for crewmen on passenger locomotives and through-freight locomotives, and trains—and the right to eliminate firemen from road freight and yard diesels. Object: "A fair day's work for a fair day's pay."

Present indications are that the unions will give careful study to the management proposals before serving their own counterdemands—probably late in November.

The three-year moratorium on work-rule changes has ended—and rail management has unveiled six specific proposals aimed at wiping out a $500,000,000-a-year "featherbed."

The railroad demands, served under provisions of the Railway Labor Act, reflect management's determination "to overhaul the old pay and working rules structure and bring it back into relationship with modern operating and competitive reality." In summary, the proposals would:

1) Revise the 40-year-old pay standard for engine and train crews to reflect today's greatly increased train speeds. Mileage pay rates, which now allow crews operating passenger locomotives and through-freight locomotives and trains a basic day's pay for covering 100 miles, would be adjusted to give effect to the increased-speed basis and allow runs of 160 miles for a full day's pay. Corresponding adjustment would be made in passenger train rates, with little or no change in yard and local-freight service.

A companion proposal would end union spread-the-work rules which limit mileage covered by operating employees (and thus their earnings). The effect of this would be to increase earnings opportunities for individual employees.

2) Eliminate rules banning crews from operating through present crew-change points, so as to end multiple changes on short train runs and permit the extension of crew operations in keeping with rising train speeds.

3) Wipe out "arbitrary" lines now drawn between the work that may be performed by road crews and yard crews, thereby allowing full interchange of these crews without penalty payments.

4) Establish the right (which Canadian roads now have) for management to determine when firemen should be used on non-steam locomotives in freight and yard service. The fireman position on passenger diesels would not be affected.

5) Eliminate all rules which stipulate the number of crew members required, and allow management to determine when and where to use trainmen, conductors, engineers and others.

6) End rules requiring standby operating employees when self-propelled equipment is used in track maintenance, repair or inspection.

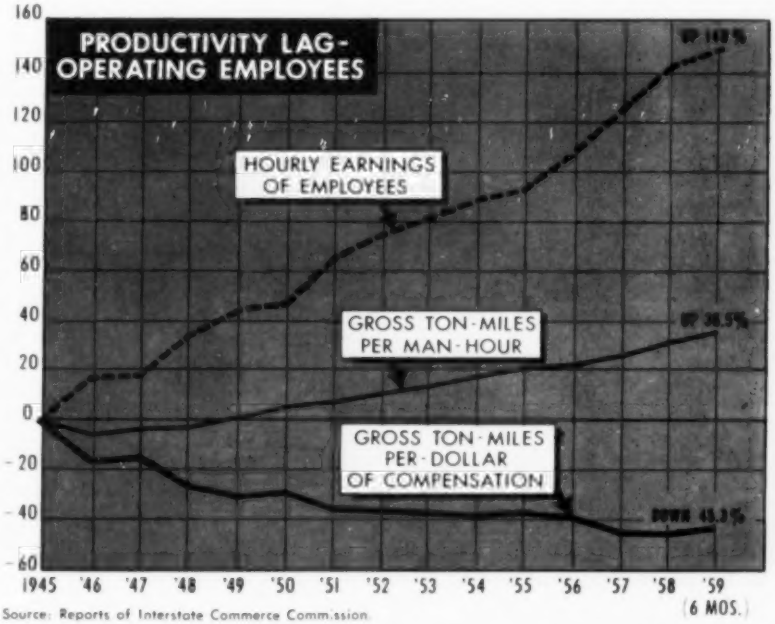
Simultaneous with the filing, the railroads wrote the president of the Brotherhood of Locomotive Firemen & Enginemen that "we recognize that our proposals will have an effect on the employees you represent." They added, "We will be glad to give full consideration to these problems and any proposals your organization may have in connection therewith."

In connection with the proposal to extend crew runs, the railroads also offered to negotiate or submit to arbitration questions involving allowances for the initial expenses employees may incur in moving to new home terminals.

Management statements accompanying announcement of the demands put the cost of featherbedding at "over $500,000,000" a year. Management spokesmen say that about $150,000,000 would be saved by the proposed revision of the dual-pay system. They put the cost of employing unneeded firemen at $200,000,000 a year.

Speaking for the railroads, Theodore Short, chairman of the Western Carriers' Conference Committee, said that an end to employment waste, as envisioned

(Continued on page 50)



Source: Reports of Interstate Commerce Commission

PRODUCTIVITY PER DOLLAR of operating employee compensation has declined by 45.3% since the end of World War II. One cause of this: featherbedding.

Full text of the work-rule demands served by the railroads this week on the operating brotherhoods begins on page 16 ——►

Symes, Greenough Move Up on PRR

James M. Symes, president of the Pennsylvania since June 1, 1954, has been elected chairman of the board and chief executive officer of that road, effective Nov. 1.

Named to succeed Mr. Symes as president is Allen J. Greenough, vice-president—transportation and maintenance of the PRR. His duties will include those of chief administrative officer.

The change was described as a further step in the Pennsylvania Railroad's program for streamlining its organization.

This top-level shift in PRR management, which came as a surprise in railroad circles, was announced following a board of directors meeting in Philadelphia last Wednesday.

Richard K. Mellon, senior member of the board, issued a brief statement saying that Mr. Symes' new position "denoted the fact that, because of his wide experience, he is recognized as one of the leading transportation authorities in the United States."

Mr. Symes, who is 62, entered railroad service with the PRR in 1916. Mr. Greenough, 54, joined the road in 1928 as an engineering assistant, following graduation from Union College, Schenectady, N.Y.

Three other changes in the PRR management group were announced in conjunction with the executive changes.

P. M. Roeper, general manager, transportation, was appointed vice president—transportation and maintenance, to succeed Mr. Greenough. A. Mosby Harris, regional manager of the road's Buckeye Region, Cincinnati, succeeds Mr. Roeper; and Howard C. Kohout, assistant general manager of PRR's Lake Region, Cleveland, becomes regional manager at Cincinnati, succeeding Mr. Harris.

Mr. Symes' career has included service at most major cities on his road as well as a period, 1935-39, as vice president—operations and maintenance of the Association of American Railroads. He was appointed vice president—operations of the PRR system in 1947 and was executive vice president prior to being named president of the road in 1954.

Mr. Greenough moved up in the engineering department to division engineer in 1939. He was transferred to operations in 1945 as superintendent, and later served as general superintendent, assistant general manager and general manager. He was appointed vice president, Eastern Region, in 1953, and to system vice president—transportation and maintenance, in November 1955.

Mr. Roeper, who joined the PRR in the engineering department in 1928, subsequently moved through various positions to become regional manager at New York in 1955. He was appointed general manager—transportation at Philadelphia in December 1957.

Watching Washington *with Walter Taft*

• **NOV. 1's WAGE INCREASE** was three cents per hour for railroad employees working under agreements with escalator clauses. That was a cent more than had been expected, and it will cost the railroads about $60,000,000 a year.

THE RAISE was determined by the Bureau of Labor Statistics' cost-of-living index for September. That was 125.2, or 8.1 points above September 1956's 117.1 which is the escalator-clause base. Up or down adjustments of one cent per hour are required for each half-point change from that base. The 8.1-point rise thus built up the increases to 16 cents per hour, i.e., three cents in addition to 13 cents already provided by previous raises.

• **MORE LIBERAL CREDIT** arrangements will be denied carload shippers if the ICC follows advice it has received from Examiner A. L. Corbin. The examiner recommends an adverse Commission decision on the southeastern railroads' petition for authority to allow a maximum of 120 hours, instead of the present 96-hour allowance, for payment of charges. The 120-hour plan already applies to LCL charges.

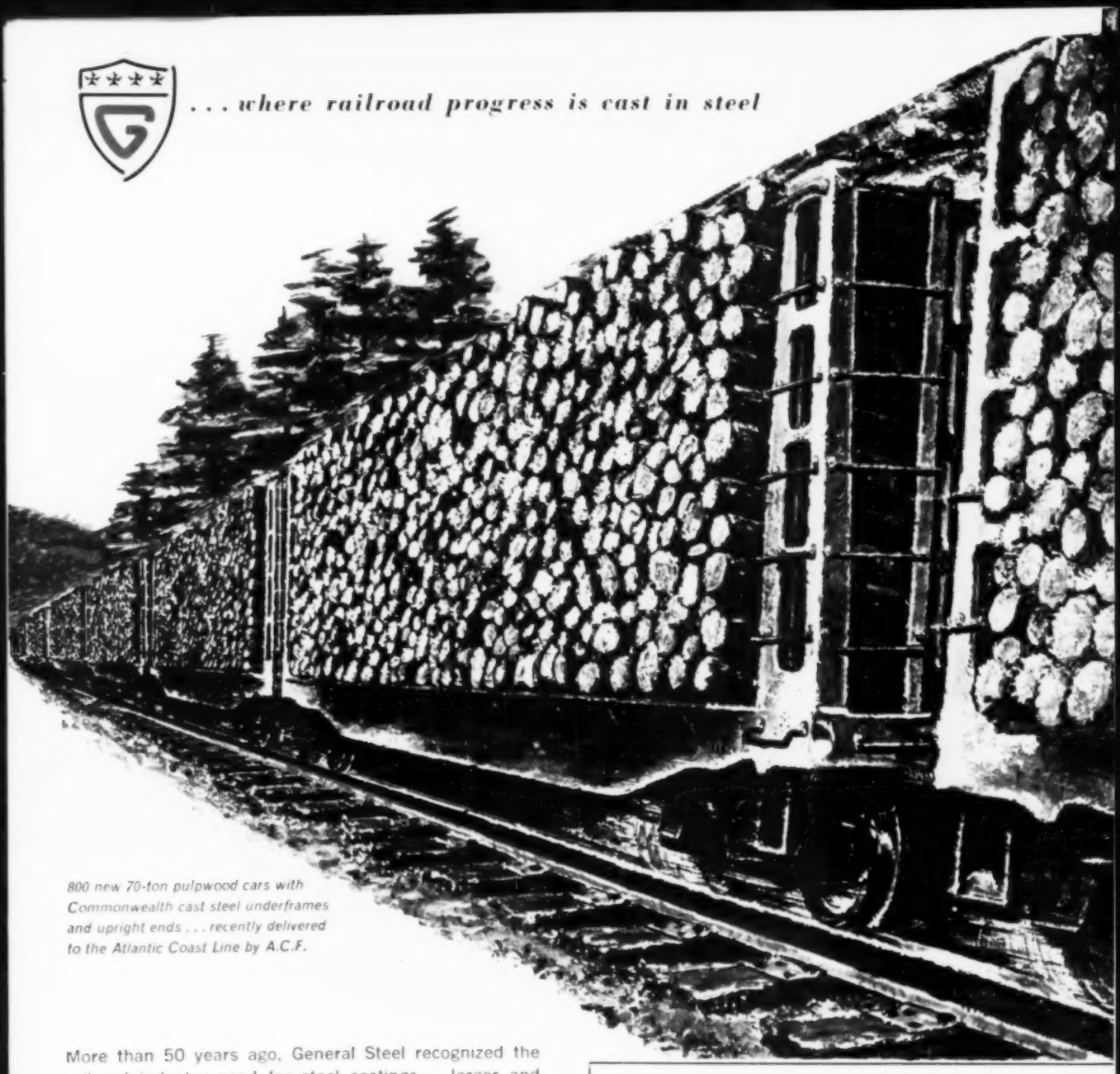
TRUCK COMPETITION is the reason for the railroad proposal. Truckers now have much more liberal credit arrangements. The credit period available to their shippers can be as long as 14 or 15 days, plus intervening Sundays or legal holidays.

OFFICIAL-TERRITORY RAILROADS, other than C&O, oppose the proposal. These protestants fear that the resultant competitive situation would force them to adopt like arrangements. And that, they say, would reduce their "working cash" by several million dollars, thus worsening their present financial condition.

SHIPPERS supporting the proposal did not make a record which indicates that the credit period is a material factor in determining what mode of transportation they use. They seem more interested in getting additional time to process freight bills than in credit as such.

• **INSTALLMENT PLAN** for payment of motor freight charges is involved in another pending case. This is a proposal of North American Van Lines, and it would permit motor carriers of household goods to offer time-payment arrangements for periods up to two years—at rates higher than regular charges. The Commission has agreed to determine whether its motor carrier credit rules should be modified to accommodate the plan.

. . . where railroad progress is cast in steel

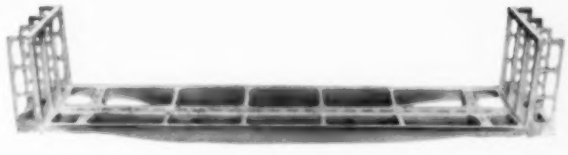


800 new 70-ton pulpwood cars with Commonwealth cast steel underframes and upright ends . . . recently delivered to the Atlantic Coast Line by A.C.F.

More than 50 years ago, General Steel recognized the railroad industry need for steel castings . . . larger and more complex than ever before conceived.

Advanced engineering and production techniques developed through its pioneering have made General Steel a unique supplier to today's railroads. Its Commonwealth one-piece products . . . for freight cars, passenger cars and locomotives . . . utilize cast steel's great strength at minimum weight, exceptional ruggedness and freedom from maintenance to cut operating expenses for users throughout the world.

Plan wisely for the future . . . invest in Commonwealth products.

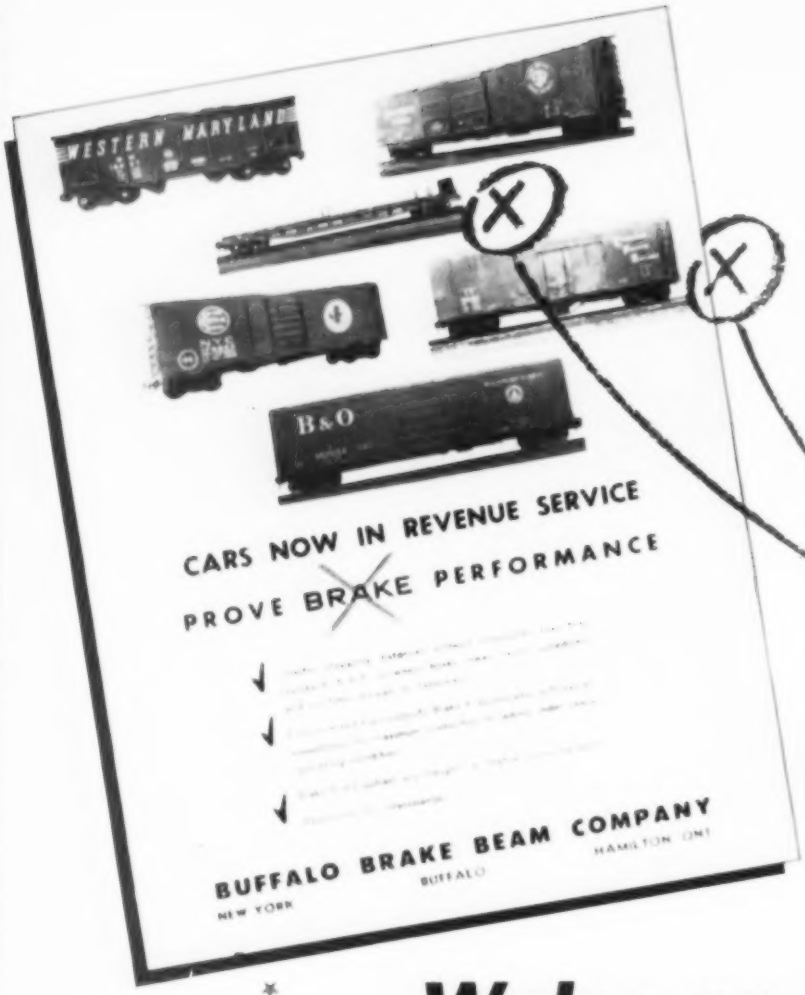


Commonwealth cast steel underframe and interlocking upright ends simplify pulpwood car construction; provide greater strength, permit easier loading, maximum capacity.

GENERAL STEEL CASTINGS

GEARED TO PROGRESS
P R I
MEMBER

GRANITE CITY, ILL. · EDDYSTONE, PA. · AVONMORE, PA.



BRAKE

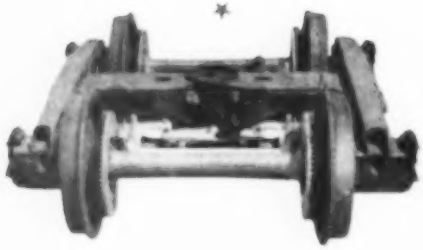
IN CANADA, TOO

We're on the Move...

Two of the initial group of freight cars equipped with Buffalo Single Disc Brake-X in regular revenue service were subjected to the severe operating conditions frequently encountered by the Canadian railroads.

Canadian National Piggyback Car No. 681009 and Canadian Pacific Refrigerator Car No. 283192, after 3 years of in-service tests, are piling up an impressive total of trouble-free mileage.

Inspection reports on each of these cars are available on request.



BRAKE-X *THE WORLD'S NEWEST BRAKE BY*

BUFFALO BRAKE BEAM COMPANY

NEW YORK

Trailer Train Grows in South

► **The Story at a Glance: Four new members of Trailer Train will provide greatly expanded piggyback service between the South and points in the Midwest and on the East Coast. The new members, Atlantic Coast Line, Seaboard Air Line, Gulf, Mobile & Ohio and Illinois Central, join 14 other roads and a freight forwarder in membership in the piggyback-car-leasing pool. Meanwhile, a Trailer Train advisory committee has laid plans for continuing container research.**

Two of Trailer Train's newest members, Atlantic Coast Line and Seaboard Air Line, are developing plans for expanding piggyback service between the South and Washington, Baltimore, Philadelphia and New York. Two other new members, Illinois Central and Gulf, Mobile & Ohio, will expand service between the South and Chicago, St. Louis and other points in the Midwest.

Total membership in Trailer Train, the nation's largest owner of piggyback cars, is now 18 railroads and one freight forwarder. The 18 roads represent 42% of the total Class I railroad mileage in the United States. All members have access to the 2,314 special flat cars TTX has in service and will have access to the additional 800 cars on order.

J. M. Fields, ACL vice president of traffic, said his road joined Trailer Train "to enable us to obtain an efficient and economical supply of piggyback cars as we move into this new field of transportation." The ACL will offer through piggyback service between East Coast points and Miami, Jacksonville, Tampa and Orlando in Florida, and Atlanta, Ga.

Seaboard piggyback service will reach the same points plus Savannah, Ga., Birmingham, Ala., and Charlotte, N.C., according to Vice President J. P. Derham, Jr. Inauguration of through piggyback service between the Southeast and Eastern cities will add "another valuable service to meet the expanding transportation needs of this rapidly growing section of the country," Mr. Derham noted.

E. J. Carr, Illinois Central vice president of traffic, said: "We believe that the piggyback method is one of the prime tools for making better service available to our patrons." IC has piggyback terminals in Chicago, New Orleans, Memphis, St. Louis and Omaha.

The Trailer Train membership is the first venture into the piggyback field for GM&O. In announcing it, President G. P. Brock said: "The growing demand for piggyback service from our patrons has prompted us to join Trailer Train Company. We feel that membership will be most advantageous to our shippers and receivers because of the great opportunity it affords for widespread interchange of traffic with other members." GM&O piggyback will serve the territory between Chicago and the Gulf ports of Mobile and New Orleans.

Trailer Train Board Chairman J. P. Newell commented that: "The addition of these four railroads means that Trailer Train's membership has doubled in less than a year. Trailer Train's business so far this year is about 130% ahead of last year, compared with an increase in piggyback volume on a national basis of about 60%. Trailer Train members alone are carrying more than half the national total. We believe this success graphically illustrates the advantages of having a national pool of piggyback cars rather than separate ownership by individual railroads."

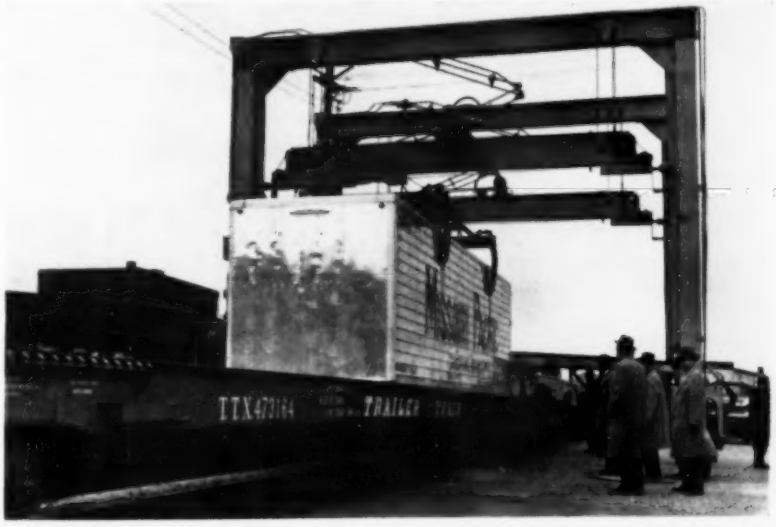
In a separate development last week, the Mechanical Advisory Committee of Trailer Train took steps aimed at encouraging standardization in the fast-growing field of container transport. Members of the Mechanical Advisory Committee of Trailer Train, meeting in St. Louis, studied a number of container applications and laid plans for continuing research as container standards are developed.

"Many people feel there is a definite trend toward containers just around the corner," says Trailer Train General Manager J. E. Wightman, "and if this trend materializes, we will be in the vanguard in establishing compatible car equipment for this service, which will be of use to all our members."

The advisory committee, made up of mechanical officers from five of Trailer Train's 18 member roads, said the St. Louis meeting was concerned with three principal problems: anchoring methods, impact cushioning requirements and means of fitting Trailer Train's present car fleet so it may carry either containers or conventional trailers. Several methods of loading and unloading containers were also studied.

The committee paid particular attention to the question of whether standardized containers, when they come, should have uniform tie-down attachments, or whether cars should be designed to be compatible with several varieties of container. The conclusion of the engineers was that a standard tie-down for all containers would be far more practical and would be no more difficult to obtain than the standard king pin of present truck trailers.

J. Howard Long, chief mechanical officer of Trailer Train, said that he believed the present 85-ft TTX cars can efficiently carry whatever length containers are eventually adopted as standard, and added, "We don't think it will be too difficult to convert them to dual use."



A TRAVELIFT CRANE demonstrates for members of Trailer Train's Mechanical Advisory Committee how it can load or unload containers on an 85-ft TTX flat car. In the demonstration staged at MoPac's Gratoit Yards in St. Louis, a 37-ft aluminum container was lifted onto the car in less than 5 minutes.

Four-span railroad bridge over Dallas-Fort Worth Turnpike...

Great Southwest RR saved $10,000 by choosing bridge girders of prestressed concrete

The twelve pretensioned, prestressed concrete bridge girders over the Dallas-Fort Worth Turnpike are the longest of this type ever used on a U.S. railroad. Great Southwest achieved low cost and ease of erection, got the bridge up fast across the busy turnpike. The twelve 67-foot beams and twelve 46-foot beams were all placed in two daylight working days without interrupting traffic!

The cost of all girders in place was only $26,370. Part of the savings came from the inherent economy of prestressed concrete construction. Even greater savings were possible because engineers modified highway girder forms on hand for railroad loading, saved the cost of special forms.

Great Southwest is one more modern railroad turning to concrete for construction economy, durability and more efficient operation.

Design by: Powell and Powell, Consulting Engineers, Dallas, Texas.
Owners: Great Southwest Railroad, Inc., Dallas, Texas

PORTLAND CEMENT ASSOCIATION

A national organization to improve and extend the uses of concrete

Through constant research...

... and cooperation with leaders of Canadian transportation, National Steel Car Corporation Limited and its subsidiary, Canadian Trailmobile Limited are well qualified to assist you in the selection of railway rolling stock and highway semi trailer equipment to meet "piggyback" requirements.

Shown below are two examples of the products that have been produced through working with the railways and highway transport operators . . the National Steel Car Corporation Limited, 46' C P R Highway Trailer Flat Car and the Trailmobile C-68. Both of these units were developed through companies engaged in the transport of freight by "piggyback".

BUILDERS OF RELIABLE RAIL TRANSPORT

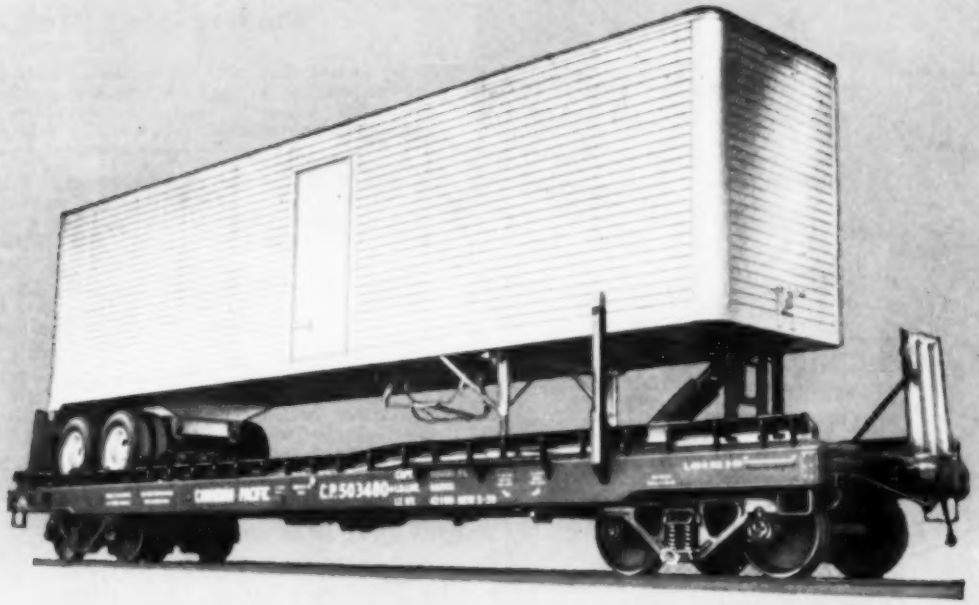
NSC

T/M TRAIL MOBILE

NATIONAL STEEL CAR
CORPORATION, LIMITED
HAMILTON AND MONTREAL

and its subsidiary

CANADIAN TRAILMOBILE LIMITED
TORONTO



A.A.R. JOURNAL BEARINGS

It's not just a question of low initial cost; they offer the utmost in load capacity, protection for lading, ease and simplicity of maintenance and many other advantages. They all add up to a BIGGER NET RETURN per car dollar invested.

CANADIAN BRONZE CO., LTD.

Divisions: Montreal Bronze Limited, Montreal; Northwestern Brass Limited, Winnipeg and Calgary
St. Thomas Bronze Co. Limited, St. Thomas; Winnipeg Brass Limited, Winnipeg

URECO® metal floor racks

● for refrigerator cars

Better than wooden racks, which splinter and warp and absorb moisture and odors from the cars' lading, these lightweight racks made of steel or aluminum alloys form smooth, level floors for either new or replacement installations.

URECO Metal Floor Racks, only slightly higher in original cost than wooden racks, reduce maintenance cost to a minimum and save costs of damage and loss claims. Hence they are a wise and thrifty investment.

The illustrations show a floor with URECO racks in position for use (above) and with one section lifted (right) to show how the construction provides air circulation freedom both laterally and longitudinally.

URECO racks are available in any height and section modulus required. They are manufactured and sold in Canada under Canadian patents. American manufacturers and distributors are the Union Railway Equipment Company, 1922 Green Bay Road, Evanston, Illinois.

Write for further information to:

W. K. DAVIDSON AND CO., LTD.

8355 Bougainville Street, Montreal, Quebec

*® in Canada and the United States of America.

PERFORMANCE - ECONOMY - VERSATILITY

WITH THE

251 ENGINE

Throughout Canada, MLW-built locomotives are establishing new standards of performance and fuel economy combined with greatly reduced maintenance costs.

This outstanding record has been consistently maintained and proved over a period of years and is based upon the unprecedented success achieved by the Alco 251 engine.

Canadian railway acceptance of this remarkable engine parallels that of many other perceptive railways around the world. MLW locomotives equipped with 6-cylinder, 12-cylinder and 16-cylinder versions of the 251 engine are currently in operation across Canada.

These versatile MLW locomotives, in sizes ranging from 1000 to 2400 h.p., are fulfilling passenger mainline, freight, branch line, and switching assignments with maximum efficiency and economy.

Backing up these locomotives is an efficient nation-wide MLW service and parts organization to help make MLW locomotives the best diesel investment obtainable and to maintain the Alco 251 as "The finest diesel engine anywhere."

MONTREAL LOCOMOTIVE WORKS
LIMITED

MLW

WELLMAN*

LOCOMOTIVE CRANES

Repeat orders prove that the all new Wellman Diesel-Electric Locomotive Crane performs to enthusiastic customer satisfaction. Versatile, powerful, only Wellman Locomotive Cranes offer all of these important features:

DOUBLE-ROW BALL-RACE ROTATION for low rotating mechanism maintenance, smooth operation.

FULL VISION CAB to give operator complete view of hoisting drums and work area.

SIXTY YEARS OF ENGINEERING ADVANCEMENT to meet today's needs for dependable performance and easy maintenance.

Capacities from 25 to 80 tons. Catalog available on request.

Locomotive Crane Division
THE WELLMAN ENGINEERING CO.
CLEVELAND 14, OHIO

*Successors to Browning Locomotive Crane

Full Text of Work-Rule Demands

BASIS OF PAY AND ASSIGNMENT OF EMPLOYEES

Basis of Pay

A. Except as hereinafter provided, eliminate all agreements, rules, regulations, interpretations and practices, however established, applicable to any class or grade of train, engine, yard or hostling service employees, which

(i) provide for rates or bases of pay, daily earnings minima, minimum daily earnings or daily, weekly or monthly earnings guarantees,

(ii) provide for arbitrary payments, or special or constructive allowances, which conflict with the payment of single time in miles or hours from the time called to report for duty until released from duty, or

(iii) impose restrictions on weekly, monthly or annual earnings through the limitation of miles run or paid for, hours worked or paid for or compensation received.

B. Establish a rule to provide that

1. Train and engine service employees used in road service, including all miscellaneous and unclassified services, shall be paid single time in miles or hours, whichever is greater, from the time called to report for duty until released from duty at the end of the trip or tour of duty, as follows:

(a) All road miles actually run during each trip or tour of duty shall be paid for at the rates provided in paragraph 3 of this rule; or

(b) All time on duty shall be paid for on a minute basis at the straight time hourly rates provided by paragraph 3 of this rule, except that (i) In freight service overtime shall be paid for at 1½ times such straight time hourly rates. In assigned local freight service overtime shall begin when the time on duty exceeds the miles run divided by 12½, and in all other classes of freight service (including miscellaneous and unclassified services) overtime shall begin when the time on duty exceeds the miles run divided by 20; but in any case overtime shall not accrue until the expiration of 8 hours from time of first reporting for duty; and (ii) On short turnaround passenger runs, no single trip of which exceeds 80 miles, including suburban and branch line service, time shall be paid on the minute basis at straight time hourly rates for all time actually on duty, or held for duty, in excess of 8 hours (computed on each run from the time required to report for duty to the end of that run) within 9 consecutive hours; and also for all time in excess of 9 consecutive hours computed continuously from the time first required to report to the final release at the end of the last run. Time shall be counted as continuous service in all cases where the interval of release from duty at any point does not exceed one hour. For calculating time paid for as provided herein, the Management may designate the initial trip.

2. Train and engine service employees used in yard service, including transfer, belt line, hostling and all miscellaneous services to which mileage rates do not apply, shall be paid single time, from the time called to report for duty until released from duty, at the straight time rates provided in paragraph 3 of this rule; except that under circumstances where existing rules provide for the payment of overtime at 1½ times the hourly rate, such payments shall be continued at 1½ times the hourly rates provided in paragraph 3.

3. Mileage and straight time hourly rates of pay shall be as follows:

Note: The mileage and straight time hourly rates to be provided in this paragraph 3 shall be determined by multiplying standard mileage and pro-rata hourly rates currently paid under existing agreements immediately prior to the effective date of this proposed rule by the conversion factors set forth in the following table. For classes and grades of service where rates of pay are graduated, the rate paid in the weight on drivers or car scale rate bracket specified in Column (2) of the table shall be used in computing the new single rates.

Grade of service	Identification of the current graduated rate, if rates are graduated, to be used in calculating the new single rates —weight on drivers or car scale rate bracket	Conversion Factor	
		Rate Per Mile	Rate Per Hour
(1)	(2)	(3)	(4)
Passenger Service Other Than Short Turnaround			
Engineers and motormen	450,000 to 499,999 lbs.	.625	1.6
Firemen and helpers	Less than 80,000 lbs.	.625	1.6
Conductors	—	.667	1.067
Assistant conductors and ticket collectors	—	.667	1.067
Baggagemen	Minimum rate	.667	1.067
Brakemen and flagmen	—	.667	1.067
Short Turnaround Passenger Service			
Engineers and motormen	170,000 to 199,999 lbs.	.6416	1.0
Firemen and helpers	Less than 80,000 lbs.	.625	1.0
Conductors	—	.667	1.0
Assistant conductors and ticket collectors	—	.667	1.0
Baggagemen	Minimum rate	.667	1.0
Brakemen and flagmen	—	.667	1.0
Assigned Local Freight Service			
Engineers and motormen	250,000 to 299,999 lbs.	1.0	1.0
Firemen and helpers	Less than 140,000 lbs.	1.0	1.0
Conductors	Less than 81 cars	1.0	1.0
Brakemen and flagmen	Less than 81 cars	1.0	1.0

Through Freight Service

Engineers and motormen	750,000 to 799,999 lbs.	.625	1.0
Firemen and helpers	Less than 140,000 lbs.	.625	1.0
Conductors	106 to 125 cars	.625	1.0
Brakemen and flagmen	106 to 125 cars	.625	1.0

Note: Under circumstances where existing rules provide for conversion from through to local freight rates, the following amounts shall be added to the above mileage and hourly rates:

(a) Engineers, motormen and conductors—0.35¢ to the mileage rates and 7.00¢ to the hourly rates.

(b) Firemen and helpers—0.25¢ to the mileage rate and 5.00¢ to the hourly rate.

(c) Brakemen and flagmen—0.26875¢ to the mileage rate and 5.375¢ to the hourly rate.

Grade of service	Identification of the current graduated rate, if rates are graduated, to be used in calculating the new single rates —weight on drivers or car scale rate bracket	Conversion Factor: Rate Per Mile	Conversion Factor: Rate Per Hour
(1)	(2)	(3)	(4)

Other Freight Service

(Including All Miscellaneous and Unclassified Services)

Engineers and motormen	250,000 to 299,999 lbs.	.625	1.0
Firemen and helpers	Less than 140,000 lbs.	.625	1.0
Conductors	Less than 81 cars	.625	1.0
Brakemen and flagmen	Less than 81 cars	.625	1.0

Note: The conversion factor shall be applied to the standard through freight rate paid in the bracket specified.

Yard, Transfer, Belt Line And All Miscellaneous Services To Which Mileage Rates Do Not Apply

Engineers and motormen	200,000 to 249,999 lbs.	—	1.0
Firemen and helpers	Less than 140,000 lbs.	—	1.0
Conductors and foremen	—	—	1.0
Brakemen and helpers	—	—	1.0
Switchtenders	—	—	1.0
Outside hostlers	—	—	1.0
Inside hostlers	—	—	1.0
Outside hostler helpers	—	—	1.0
Car retarder operators	—	—	1.0

Note: Where the five-day work week is in effect, the factors set forth above shall be applied to currently applicable five-day work week rates. Where the five-day work week is not in effect, such factors shall be applied to currently applicable (or basic) rates covering other than five-day work week service. Where existing rules provide for paid holidays, 4.0¢ per hour shall be deducted from the rates derived by such application of the foregoing factors.

4. Minimum earnings from all sources for each tour of duty, from the time called to report for duty until finally released, including aggregate service for which payment is made on a continuous time basis, shall not be less than pay for 5 hours at straight time rates in passenger engine service (other than short turnaround); 7½ hours at straight time rates in passenger train service (other than short turnaround), and 8 hours at straight time rates in short turnaround passenger engine and train service, and in all classes of freight and yard engine and train service, including miscellaneous and unclassified services.

5. Compensation for time held at away from home terminal, deadheading, attending court and attending investigations shall be paid under existing rules (if any) at the rates provided in paragraph 3 of this rule or at a fractional part thereof as may in each case be provided by existing rules.

6. All agreements, rules, regulations, interpretations and practices, however established, which conflict with the foregoing provisions of this rule shall be eliminated; and no employee paid pursuant to the provisions of this rule shall receive any other or additional compensation for any service performed during his tour of duty; provided, that existing rules and practices considered by the carrier to be more favorable are preserved.

Road Train and Engine Service Assignments

A. Except as hereinafter provided, eliminate all agreements, rules, regulations, interpretations and practices, however established, applicable to any class or grade of road train or engine service employees, which

(i) prohibit or impose restrictions on the right of the carrier to establish, move, consolidate or abolish crew terminals, or merge or consolidate seniority districts,

(ii) prohibit or impose restrictions on the establishment or operation of interdivisional, interseniority district, intradivisional or intraseniority district runs,

(iii) prohibit or provide penalties for running crews through established crew terminals, or

(iv) provide for automatic release of crews upon arrival at terminals or end of run, or when off of assigned territory.

B. Establish a rule to provide that

1. The carrier shall have the right to establish, move, consolidate and abolish crew terminals, to merge and consolidate seniority districts and to establish interdivisional, interseniority district, intradivisional and intraseniority district runs in assigned and unassigned service with the right to operate any such run, whether assigned or unassigned (including extra service), on either a one way or turnaround (including short turnaround) basis and through established crew terminals. The right to operate such runs as may be established under the provisions of this rule will be free of the imposition of any restrictions as to class of traffic which may be handled or as to the origin or destination of any empty or loaded cars moving on such runs; and such service shall be paid for at the rates provided in paragraph 3 of the Basis of Pay Rule.

2. No rule, regulation, interpretation or practice, however established, shall be construed to in any way prohibit, restrict or limit the provisions of paragraph 1 of this rule except as provided in sub-paragraphs (a) and (b) of this paragraph 2.

(a) The carrier shall distribute the mileage ratably as

Continued on page 46

Special Report: The Changing

End of an Era—p. 38

Differences and Likenesses—p. 20

The Big Speed-Up—p. 30

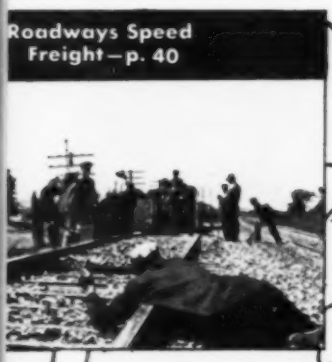
Rates, Regulation and Traffic—p. 28

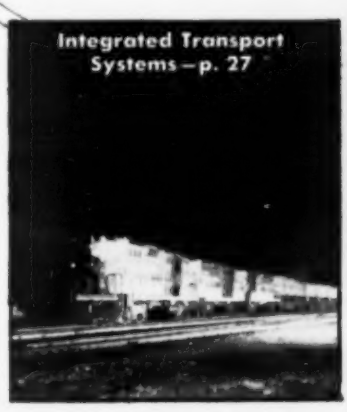
Expanding Competition—p. 22

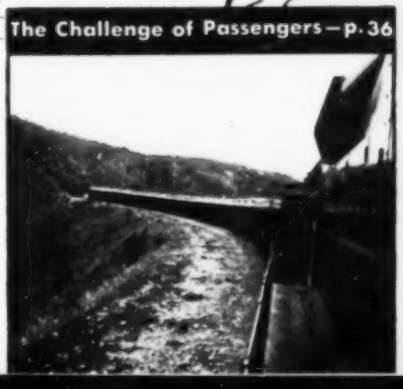
Canada's railroads continue to grow while much of the rest of the North American railroad industry shrinks. Here's the Canadian story, with an analysis of certain Canadian freedoms that U.S. railroads are fighting for.

By Associate Editor **Rod Craib**

Face of Canada's Railroads







ONSL
SEVEN ISLANDS
ST. JOHN'S
FERRY
SIDNEY
AC & HB
QUEBEC
HALIFAX
ONR
SAULT STE. MARIE
OTTAWA
MONTREAL
TORONTO
CHICAGO

CNR MAIN LINES
CPR MAIN LINES
OTHER LINES
PROPOSED
UNDER CONSTRUCTION

CANADA'S RAILWAY SYSTEM, best known for its two giants, actually includes 26 roads, among which are six U.S.-owned railroads. Pacific Great Eastern, shown here, is now third largest, after completing 1958 extensions.

Differences and Likenesses

When CNR President Donald Gordon returned to his native Scotland last summer, he characterized his new homeland as "a young nation in a hurry, stepping up the pace in the second half of this century, hell-bent on bearing out an earlier prophecy that the 20th Century would belong to Canada."

One of the leading mining countries of the world, Canada ranks first in production of nickel, platinum and asbestos; second in gold, cadmium and uranium; third in silver and zinc; and fourth in copper, lead and cobalt. In the new minerals, it has major resources in titanium, columbium and tantalum.

Canada has the same kind of diversity of resources that the United States has so successfully exploited. The great central plains have enormous reserves of oil as well as the grain capacity for which they are famous. With the largest growth of softwood in the free world, Canada is its largest exporter of pulp and paper.

Population is expected to reach 18,000,000 in September 1960. Immigration policies, though liberal, are tied to the general economic health and have slowed recently. Like the United States, Canada has recently been through the wringer of a recession.

Both in feeling the effects of the slump and in recovery, Canada was later than the United States. Although Canada was well out of the recession by the end of summer, 1959, there has been no new boom to push transportation back to its recent peaks.

Canadian Pacific President N. R. Crump told a Canadian television audience recently, "This country of ours is largely a problem of transportation. I don't know of any other country in the world where you have a narrow strip of settled land almost 4,000 miles between the Atlantic and the Pacific but only 200 miles deep, and that automatically means that transportation problems assume an importance in this country far beyond anything in any other country."

Since the early '20's, Canada has had a unique railroad system half owned by the government, with both the privately-owned and the publicly-owned segments prospering in competition with each other. Canada's government-owned railway is privately operated, though, and in many respects Canada has a transportation system run strictly according to the dictates of laissez-faire economics, much more so than in the United States, which is the great advocate of the laissez-faire principle.

U. S. railroads, Canadian observers point out, have either no freedom or strictly regulated freedom to manage such vital parts of their business as setting rail rates in terms of rail costs; operating rail, water or air routes to supplement rail traffic; or signing contract rates that would guarantee railroads a fixed percentage of traffic in return for attractive rate concessions. All of these freedoms, Canada's railroads have. A Canadian might properly contend that although the United States is the great exponent of private enterprise, Canada, in transportation at least, is the country that practices it.

Competition between the two Canadian rail giants is intense, perhaps more so than between any two roads in the U. S. Intense as it is, though, it is a competition in which ground rules have been set, and the competitors abide by them. President Gordon of the CNR stated recently, "In general . . . I would say our relations with the CPR are as satisfactory and as cooperative as two competitors can be in a competitive position. In other words, in these days, we do not engage in what might be called 'cutthroat competition' to the point where we hurt each other. We are strictly competitive in our struggle to obtain business from each other; but we do not do such things as building duplicate facilities just in order to get the jump on the other fellow."

Canadian National Railways

Although CNR is a publicly-owned corporation, the road is the first to assert that it is not and never was an experiment in socialism. "The Canadian National Railways is a competitive organization," its president says, "and its management [is] designed along the lines of a private enterprise organization."

Under the 1923 legislation merging several financially troubled private roads into a new company, the Canadian National, the road is operated under government ownership by a board of directors appointed by the government, and a management appointed by the board, in the same manner as a private corporation is directed by its board. CNR's shareholders are the Canadian public as a whole, and the road makes its annual report to a parliamentary committee charged with representing the people in evaluating and approving CNR management policies.

If Canadian National has a profitable year, the profit goes into the general fund of the government treasury. If a loss is recorded, the deficit is made up from the same source. Neither profits nor losses are carried forward.

Canadian National is the largest privately-operated railroad system in the free world. It maintains nearly 35,000 miles of track on 24,000 route miles in all 10 Canadian provinces and in 12 states of the United States. It operates a chain of first-class Canadian hotels covering all the large population centers in the dominion, employs more than 125,000 people, and meets an annual payroll of $420,000,000. It has airline, steamship and communication subsidies, a limited highway operation and an express department that recently averaged over 65,000 shipments a day.

As Mr. Gordon pointed out last spring, in testimony before the Sessional Committee on Railways, Airlines and Shipping (the Parliamentary Committee charged with overseeing the government investment in CNR), the Canadian National has "an operating plant which is built and ready to handle much more traffic than we were able to get in 1958. With our plant, if the volume of traffic had increased marginally, our financial results would have improved rapidly."

Canadian Pacific Railway

"The world's most complete transportation system," as it bills itself, CPR is the second largest privately-operated and the largest privately-owned railway system in the free world. Canadian Pacific operates more than 17,000 miles of routes in Canada and controls almost 5,000 miles more in the United States. Like the CNR, it operates a communications network and hotels in all of the major Canadian cities. Describing itself as an integrated transportation system, CPR operates ocean, coastal and inland steamships under its flag, an airline—that serves Canada, Europe, South America, Australasia and the Orient—and a major Canadian trucking company. Significantly, many CPR offices are equipped with globes to show the company's routes, rather than the traditional maps.

Ontario Northland

"Ontario's Development Railway," the ONR was started by the provincial government in 1902 as a logging and agricultural railroad to serve the area north of North Bay. It was originally called the Temiskaming & Northern Ontario, but the name was changed in 1946, to be more descriptive and also to avoid confusion with the Texas & New Orleans.

The ONR today is a prosperous mine and forest products road. It expects eventually that its main business will come from the line to Moosonee on Hudson Bay, where a pig-iron smelter is planned. The road estimates that the smelter would develop an annual 10-million ton traffic from the smelter to Great Lake ports. If and when this traffic develops, the ONR will probably be extended 85 miles south to Georgian Bay on Lake Huron.

Algoma Central & Hudson Bay

A privately-owned railway in Ontario, the AC&HB runs from the Lake Superior-Lake Huron port of Sault Ste. Marie north to junctions with the CPR at Franz, the CNR main line at Oba, and the CNR's northern line at Hearst. Although it lies entirely within the province of Ontario, unlike the provincially-owned Ontario Northland AC&HB has a dominion charter and comes under regulation of the federal Board of Transport Commissioners rather than the provincial commission.

Pacific Great Eastern

Known in the not too distant past as "the railroad without a beginning or end," the PGE now has both, in termini at North Vancouver, Fort St. John and Dawson Creek. Like the Ontario Northland, the PGE is provincially owned. It has been an arm of British Columbia government since 1913 when it was begun as a provincial development road. A drain on provincial funds for 40 profitless years, the road began rehabilitation in 1955, when it pushed through north and south extensions to give it terminals that would generate business.

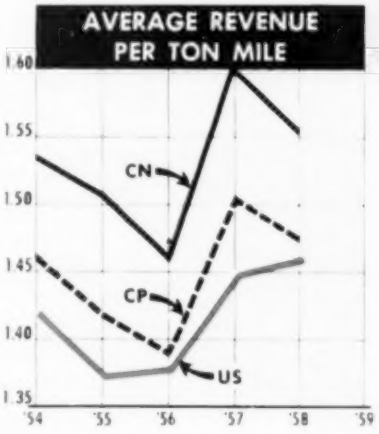
Today, the PGE is both growing and profitable. Since 1958, it has operated 790 miles between trunk-line connections at North Vancouver and Fort St. John and Dawson Creek, where it connects with the Northern Alberta Railway and the Alaska highway. PGE is a major north-south route through British Columbia for minerals, cattle, lumber and petroleum.

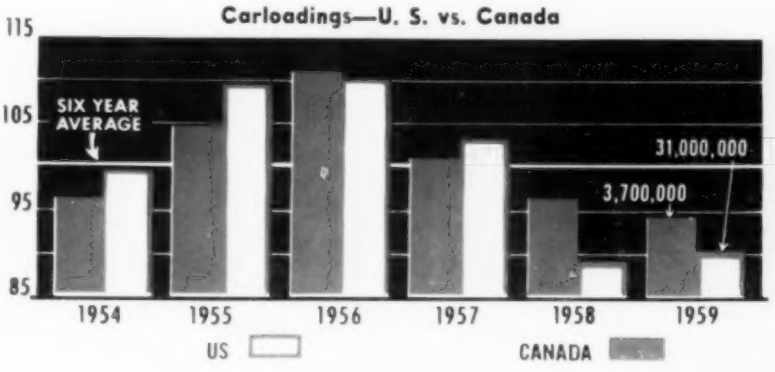
Northern Alberta

Jointly owned by the Canadian Pacific and the Canadian National, the NAR has been operated since 1925 on a 50-50 basis by the two roads. Big spurt in NAR traffic came in World War II with the Canol oil project and the building of the Alcan (now Alaska) Highway.

Development of the Frontier

Both major Canadian railways are expected to be instruments of govern-





ment policy in developing the Canadian frontier, and both have participated with the government in building new lines. For the most part, though, partly because it is the northernmost of the two lines, and partly because as an arm of government it must carry out government policy, CNR is the road that has been building most of the recent new lines into the northern frontier.

New lines the CNR has built as a "national development railway" have fallen into three categories: (1) Lines into territory where there is enough traffic potential to return the cost of the line. (2) Lines into territory with marginal traffic where industries in the territory will guarantee to provide a traffic minimum. (3) Lines in areas where the national interest is affected, and the line is built at the request of the government. In this category, the government decides what subsidy is needed. Some lines are jointly secured by a building subsidy from the government and a traffic guarantee from industries that expect to use the new line.

Among lines in progress, Canadian National is finishing a 300-mile railway in northern Quebec from Beattyville through the Chibougamau mining district to Lake St. John. This line will open up the mineral and lumber districts of northern Quebec. It was built with aid from a federal subsidy, since it does not yet have enough traffic potential to justify its development by private capital, although the line has good future earnings possibilities.

A 52-mile line from Optic Lake on the Lynn Lake line to Chisel Lake in northern Manitoba is being built under traffic guarantees from the owners of the properties. This line will link Hudson Bay Mining and Smelting properties at Snow Lake to a smelter at Flin Flon on another recently completed CNR branch. Another new branch in northern Manitoba, the Moak Lake line, is handling heavy CNR nickel movements.

A line to Pine Point on Great Slave Lake is in the works, as soon as conflicting interests in the selection of the route can be resolved. There are three alternatives, running from different points on the Northern Alberta Railway to Great Slave Lake in the Northwest Territories. It is generally assumed that the line will be jointly built by the CNR and the CPR, with government aid, and that it will, like the Northern Alberta, be jointly operated.

In northern Quebec, a new line has been proposed that would lead from present CNR lines along the north shore of the St. Lawrence to Labrador. At Seven Islands en route, the line would connect with the Quebec North Shore & Labrador.

In the far west, the Wenner-Gren Development Co. railway proposed in British Columbia seems to have the inside track in development of a rail route to Alaska. The United States government's Alaska International Rail & Highway Commission is reported to favor a proposed route using the Pacific Great Eastern, the proposed Wenner-Gren line and new construction that would be built by the U. S. government in a through rail route between Seattle and Alaska.

This consideration aside, the Wenner-Gren interests have signed a contract with the government of British Columbia agreeing to start work by April 1960 on about 500 miles of line north from the PGE-CNR junction at Prince George to the Yukon Territory border.

The extensive iron ore properties in northern Quebec near the western border at Labrador have been responsible for considerable mileage of privately-owned common carriers in the past few years. Chief among the mining lines is the Quebec North Shore & Labrador, completed in 1954. The 357-mile road runs north from the St. Lawrence port of Seven Islands, Que., to extensive mines at Knob Lake.

Wabush Iron Co. Ltd. is developing a 5-square-mile tract of ore property 200 miles north of Seven Islands. The Carol Lake Railroad, a 42-mile link with the QNS&L, will be completed in 1960 for joint service to the Carol Lake Mining Co. and Wabush Iron. The spur will later be extended to Julian Lake.

Quebec Cartier Mining Co., a subsidiary of U. S. Steel, has plans to borrow up to $200 million to finish its Lac Jeannine iron-ore project, including a 193-mile railroad running from Port Cartier (near Seven Islands) to the mine at Lac Jeannine. Some 80 miles of track have already been laid.

Earlier mining roads are the Alma & Jonquiere and Roberval & Saguenay, both built by the Aluminium Co. of Canada, and the Romaine River.

Expanding Competition: Old and New

TRAFFIC PATTERNS changed by the Seaway are typified by this English casting for Saskatchewan shown being unloaded at Duluth.

The areas in which Canada's railroads are expanding need new lines built to exploit basic resources in multi-carload and trainload movements. Essentially, the new lines (for example, the QNS&L) are designed to handle bulk traffic. As CNR President Gordon remarked at the Sessional Committee hearings, "The railway business is becoming more and more of a wholesale operation of transportation in the sense of large volume, low-revenue-producing traffic." He went on to say this did not, however, confine either business or prospects for the CNR to bulk carriage. In terms of "the integration of traffic generally," he added, "we are preserving our higher value traffic as well."

It was true until fairly recently that Canada's highways were not well

(Continued on page 26)

MOTOROLA MICROWAVE

FOR NEW EFFICIENCY AND SAVINGS IN RAILROAD COMMUNICATIONS

Spanning prairies and peaks . . . linking stations, yards and terminals throughout your main and spur line routes—Motorola microwave offers a "tailor-made", virtually *failure-proof* communications system. With Motorola microwave as the backbone of your communications team, you end wireline "saturation" problems—handle all of your voice messages, with space to spare for telegraph, VHF 2-way radio, and present or proposed data transmission links.

Service-proved reliability under all weather conditions . . . with less emergency maintenance . . . assures unsurpassed efficiency and safety in every railroad communications operation. Motorola microwave installations are setting new standards of economy and dependability in rugged railroad and other demanding uses every day. Have your Motorola Representative show you where and how versatile microwave can serve and save in your operations. Write or call today.

MOTOROLA COMMUNICATIONS & ELECTRONICS, INC.
A SUBSIDIARY OF MOTOROLA INC. • 4501 AUGUSTA BLVD., CHICAGO 51, ILL.

NORTHERN PACIFIC
RAILWAY

BUDD DISC BRAKES ON 70 NORTHERN PACIFIC CARS EXPECTED TO SAVE $101,850 A YEAR

It all started back in 1953.

The Northern Pacific Railway put into service the first of their cars equipped with Budd Disc Brakes. During the ensuing years, they continued to add new Disc Brake cars to their passenger fleet.

Comparison data compiled by Northern Pacific shows that the life of the brake shoes on disc brakes was about 20-to-1 over wheel tread brake shoes.

Also, a reduction in wheel wear of about 2-to-1 over wheels with tread brakes was realized.

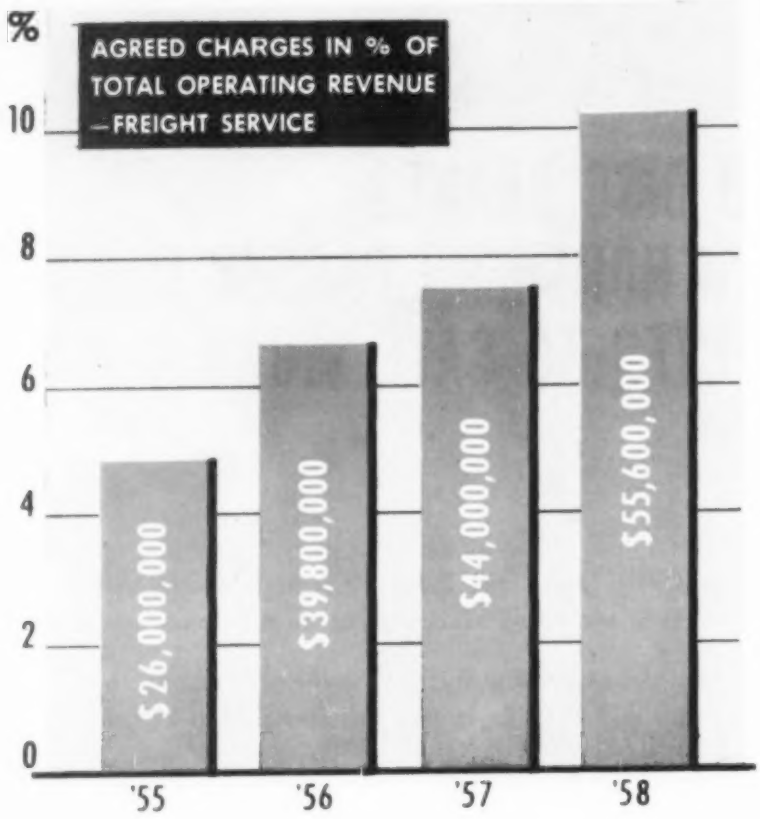
The financial saving already experienced has resulted in a program to re-equip the balance of their lightweight cars with Budd Disc Brakes. This program, involving 70 additional cars, is now under way.

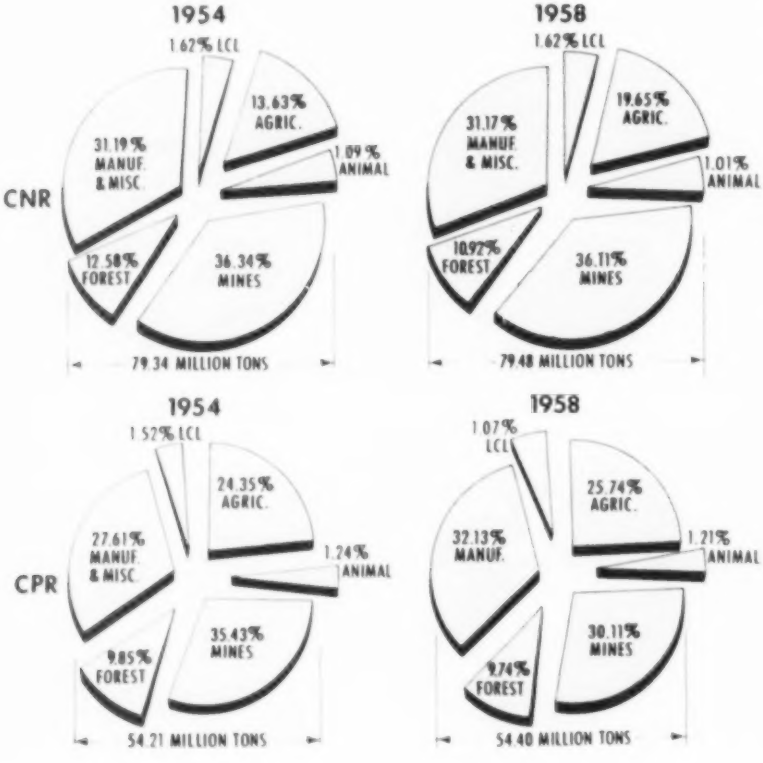
Railroad officials have estimated that this conversion to Budd Disc Brakes on 70 cars will save Northern Pacific $101,850 a year . . . which represents a 22½% return on the investment before taxes.

THE BUDD COMPANY
Philadelphia 15, Pa.

Budd

CANADA'S RAILROADS (*Continued from page 22*)





enough developed to promote the kind of active competition from trucks that U. S. railroads have long been facing. This is no longer true. Canada now has improved highways throughout the populated part of the nation, and their number is steadily increasing. Moreover, roads seldom are as crowded with passenger vehicles as in the United States, and are perhaps even more attractive to truckers. As is true in the States, the biggest competition Canada's railroads face is from the highway trucker.

Highway competition is conducted under ground rules not quite the same as those U. S. roads face, however. For one thing, highway rates are not regulated by the federal Board of Transport Commissioners. For another, the railroads have the right to set any rate they feel is necessary to meet highway competition, so long as it is compensatory.

Currently under way is a comprehensive study of freight rates and transport problems by a Royal Commission under the chairmanship of the Honorable C. P. McTague. (A Royal Commission has considerably more status than its U. S. counterpart, in part because Canadians are traditionally much more likely to follow the recommendations of an official commission than their neighbors in the States are.)

Preliminary organization meetings held in September, indicated that among the main questions to be considered would be the rapid growth of trucking, the effect of the St. Lawrence Seaway on the rail rate structure, and the effect of Crowsnest Pass grain rates (set by law at about half a cent a ton mile) on railroad finances.

Hearings began at Quebec City in October, with further eastern hearings scheduled for this month and next, and a western tour to start in January. Fireworks are expected at the first Ottawa hearings in December, when the controversial Crowsnest Pass rates will be discussed.

The Seaway, a liquid turnpike on the Canadian-American border, has become in its first year of operations a major trade route from the Canadian middle west to Europe. In the long run, the Canadian railroads seem likely to benefit from anything that spurs the development of Canadian industry. In the short run, though, they expect to lose traffic to the Seaway. President Crump of the CPR has estimated that approximately 2 million tons of CPR freight with a revenue volume of $38,000,000 annually "will be exposed to Seaway competition." CNR President Gordon says his road considers some $18,000,000 of traffic revenues as directly vulnerable and another $12,000,000 as potentially vulnerable, but which might be retained by competitive rates.

Integrated Transport Systems

Canadian Pacific takes pride in being described as "the world's most complete transportation system." In proving its right to the name, it has been working steadily towards providing both passenger and freight customers with a complete transportation service on the 85,000 miles of integrated routes by land, sea and air it operates on five continents (excluding only Africa and Antarctica).

In small shipments, a major development towards the goal of integrated service went into effect in October, in Vancouver. At the moment limited to British Columbia, Canadian Pacific's merchandise services department operations will eventually provide coast-to-coast coverage.

Basically, the merchandise services department is set up to offer a complete service using all-rail haul, highway, combined truck and rail, piggyback or air, or combinations of these methods. In the past, freight facilities for handling less-than-carload freight and package traffic have been segregated in several different CPR departments and subsidiaries, often competing with each other. In the integrated service, CPR has set up an administrative and operating organization under one management to control the solicitation, handling, transportation and accounting activities of all phases of package shipments. In addition, the new department is tied in with CPR communications to offer shipment tracing and expedited service where necessary.

Canadian National is moving in a similar direction with establishment of a Department of Merchandising Services with headquarters in Montreal. Goal of the new department is to coordinate the various rail, highway and piggyback services the CNR offers to LCL shippers.

Rail-Owned Airlines

Canadians have been watching with interest this year a struggle between CPR's Canadian Pacific Airlines and the half-CNR, half-government-owned Trans Canada Airlines. CPA, seeking the right to compete with TCA in trans-Canada routes, won a limited victory when it was given, last May, the right to operate one transcontinental flight daily.

Canadian Pacific Airlines is operated as an integral part of the overall Canadian Pacific system. TCA, on the other hand, is operated in all respects as a separate company from parent CNR. It uses some CNR facilities, and TCA financing is handled through CNR, but there is no direct integration.

Although both Canadian Pacific and Canadian National have some trucking interests, CPR has gone much farther in building a supplementary highway service. CPR owns or controls trucks operating over almost 10,000 route miles coast-to-coast. A major portion of the total was acquired in a lump when CPR last year bought control of Smith Transport Ltd, Canada's largest trucker, operating 7,000 route miles extending from Nova Scotia to Manitoba. Total highway fleet owned and controlled by CPR now amounts to almost 4,000 vehicles.

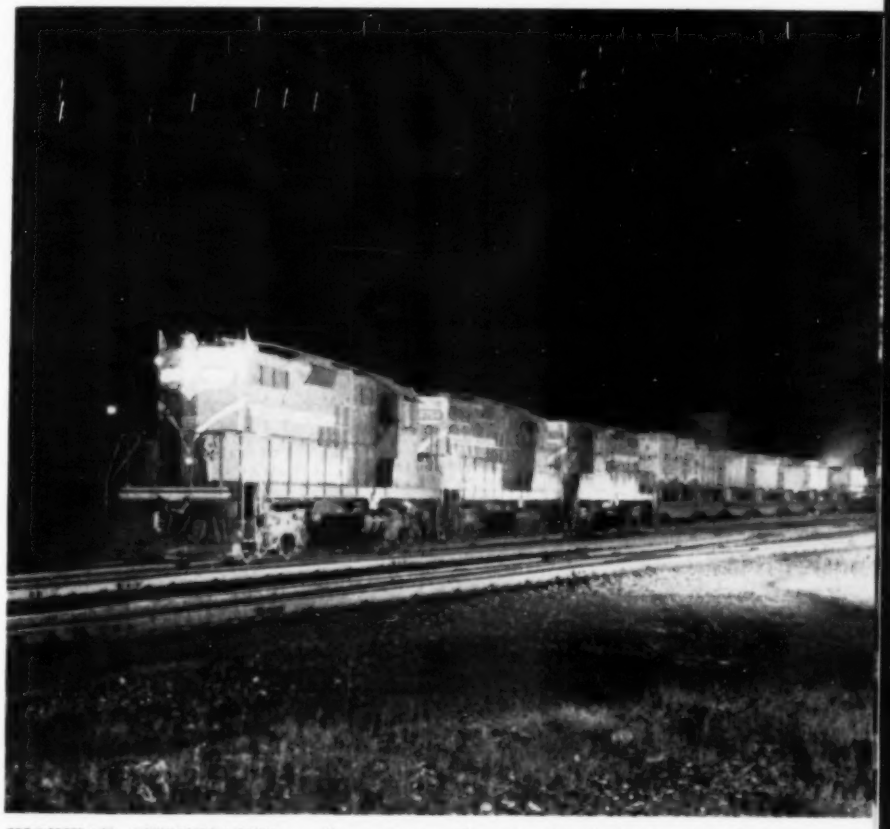
Trucking operations are subject to provincial rather than federal licensing and legislation. Although there are no serious restrictions on the right of a railroad to buy an existing trucking company, there may be difficulties in the way of a railroad establishing a new highway operation. Private truckers have brought suits in Quebec and Ontario courts to restrain the CNR from acquiring the necessary licensing permits to operate in these provinces. Piggyback rights, though, can generally be obtained without difficulty.

The Canadian National is proceeding in two ways to integrate its rail service with highway subsidiaries. Canadian National Transportation Ltd.—for 30 years CNR's chief trucking subsidiary—is being expanded. CNR is also investigating the possibility of buying a going highway subsidiary, as the CPR has done.

Railway Hotels

Hotels, long a showcase for both railways, have become less important with the declining role of passenger service. Hotel operations are now being judged strictly on their own earnings. Except in unusual circumstances such as those attending the decision to build the Queen Elizabeth hotel in Montreal, CNR says flatly that it will build no new hotels. However, resort hotels on both lines continue to do heavy vacation business, even though this no longer moves entirely by rail.

Rates, Regulation and Traffic—p. 28 ►



HIGHWAY SUBSIDIARIES, rail-owned, supplement piggyback in providing Canadian shippers with a complete freight service.

TRAFFIC DEMANDS for fast, reliable service sparked major changes. Improving 39 tunnels, CPR daylighted this.

Rates, Regulation, Traffic

Canadian railway freight rates are regulated; those of their highway competitors are not (except, rarely, by a province). But a distinction must be made between the Canadian form of regulation and that practiced in the United States.

Generally speaking, class and commodity rates are fixed at an upper limit set by the Board of Transport Commissioners. Class rates, with some exceptions, are generally equal mile-for-mile throughout Canada. Railroads are free to charge these rates or to publish lower rates as required to meet competition, providing the lower rates are compensatory, which is generally defined as being somewhat more than required to meet out-of-pocket costs.

On the whole, Canadian rate regulation seems to be regarded as fair by most elements of the transportation industry. If the truckers are at a disadvantage in being unable to make an official protest about railroad rates, they have the real advantage of being able to make any rate they wish on the spot, and even to grant rebates to get business.

Crowsnest Pass Rates

Crowsnest Pass rates on grain are to the Canadian Pacific, and to a lesser extent the Canadian National, what commuters are to railroads in New Jersey, an increasingly more troublesome burden imposed by sources beyond railway control. Crowsnest Pass rates were set originally as part of the 1897 Crowsnest Pass agreement between the Canadian government and the Canadian Pacific.

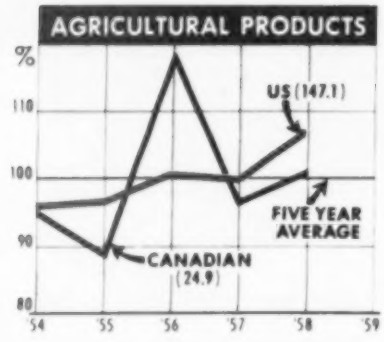
Under the original agreement, CPR reduced grain and flour rates from Canadian Pacific points to the Lakehead by 3¢ per hundredweight. The original agreement has since been superseded by a 1952 Act of Parliament, and the same rates are now in effect, not only to the Lakehead but to Pacific Coast and Hudson Bay ports and not just on the CPR but on all railways.

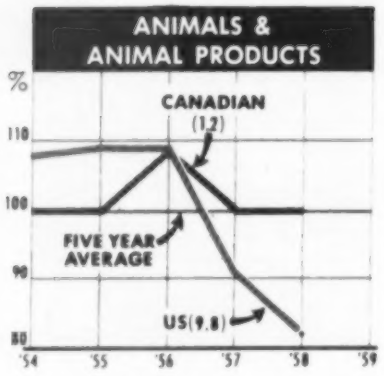
In 1958, grain and grain products moving at Crowsnest Pass rates accounted for over 34% of all CPR freight movements, yet contributed only 14% of the total freight revenue received.

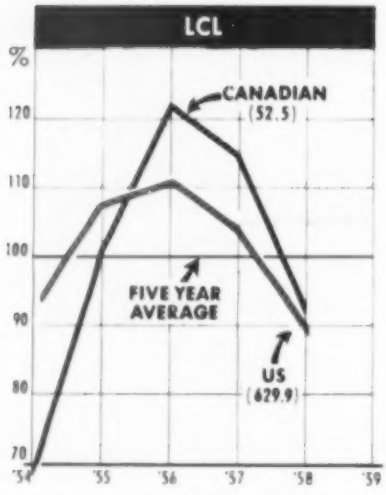
Crowsnest Pass rates are under study by a Royal Commission, as has been noted, but prospects for a change are not good. There is strong objection to any change from western agricultural interests, which are politically powerful. Opponents of the rates point out that if the movement of grain requires a subsidy, there are fairer means of providing it than the present method of recovering it from all other rail users. One possible solution: a subsidy to shippers similar to the Maritime and Bridge subsidies now in effect.

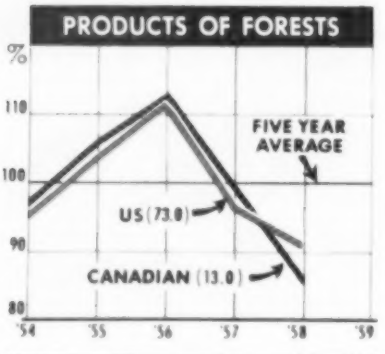
Subsidies paid to railroads on behalf of shippers who have been granted artificially lowered rates have been a factor in Canadian traffic since the Railway Act of 1927 spelled out the details of a subsidy for shippers in the Martime Provinces. Never sought by the railroads, subsidies were accepted with considerable concern that the process would lead to government control, an idea which is as generally distasteful to most Canadians as to their U.S. counterparts. The subsidies, as they have worked out, have not had

(*Continued on page 30*)









Figures in parentheses on all commodity charts are in thousands of tons at year-end 1958.

By land, by sea, by air, Canadian Pacific—the world's most complete transportation system—links five continents

Daily, Canadian Pacific's sleek scenic-dome streamliner train, "The Canadian," speeds across Canada on the Banff-Lake Louise route.

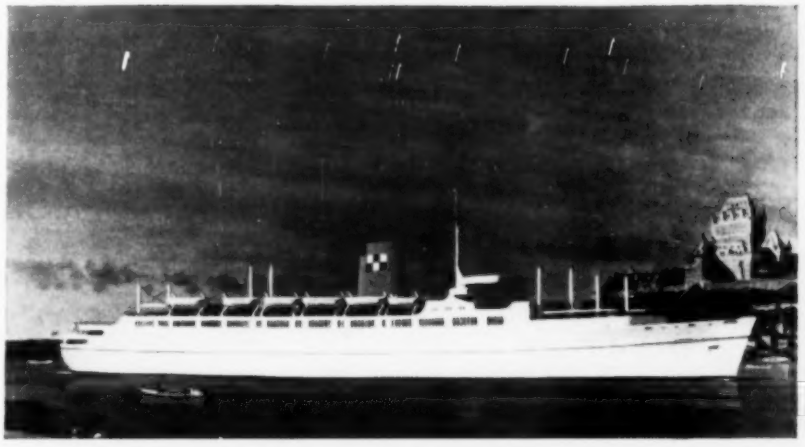
Graceful White Empress ships glide inland down the scenic St. Lawrence River on weekly voyages to Europe, sail serenely past picturesque French Canadian farms and villages.

Jet-prop Britannias fly across Canada and Britannias and DC-6B's take wing regularly for trade and resort centers of the world's continents.

Across Canada, Canadian Pacific operates a chain of hotels typified by Banff Springs and Chateau Lake Louise in the Canadian Rockies and the 1600-room Royal York in Toronto, largest hotel in the British Commonwealth.

And rounding out its many services, Canadian Pacific maintains a system of nationwide communications, express, trucking and piggyback services.

This is Canadian Pacific—the world's most complete transportation system—progressively operating more than 85,000 route miles by land, sea and air.



Canadian Pacific

RAILWAYS • STEAMSHIPS • AIRLINES
HOTELS • COMMUNICATIONS • EXPRESS
TRUCKING • PIGGYBACK

the damaging effect feared. The Canadian Pacific remains as strongly under private control as ever, and so, granting its public ownership, does the CNR.

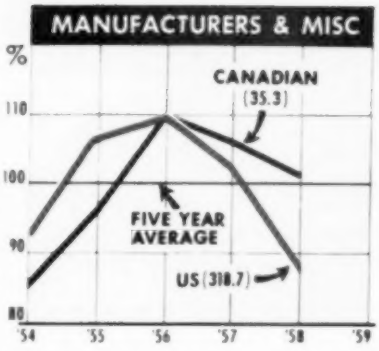
The chief subsidies are: the Maritime Provinces subsidy of, basically, 20%, the "Bridge" subsidy for movements over the route through the northern Ontario wilderness, the $20,000,000 temporary subsidy granted this year in lieu of a general freight rate increase, and a subsidy on the movement of coal and feed grains.

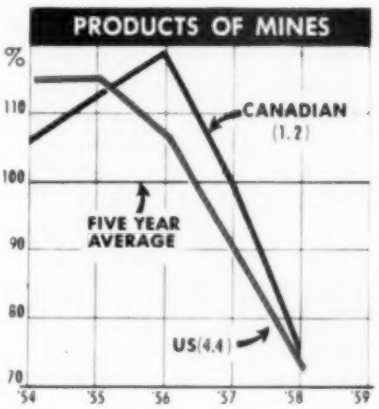
Agreed Charges

A competitive technique that has been described as "one of the most effective weapons" the Canadian railways have in retaining traffic and getting new business, agreed charges are becoming more and more important every year. As practiced in Canada, agreed charges are undertaken between railroads and any shipper who will agree to ship a percentage of his product by rail. The rate quoted is based on the percentage of traffic that is to go by rail, with better rates for higher percentages. Railroads must make a similar rate available to any other shipper of the same product who wishes to enter the agreement. With some exceptions, agreed charges can be increased only by renegotiation with the shippers. They must be compensatory.

There has been a steady increase in agreed charges, resulting from two factors: increased competition, and a change in BTC procedure. In the past, it was necessary for a railway seeking to establish an agreed charge to appear before the BTC to have the board confirm the rate. This meant a delay before the rate could take effect. The law was changed to permit the railways to put the rate in effect, subject to agreement among themselves. Once the rate was in, shippers could protest it before the board if they felt it was unfair.

Canadian agreed charges are based on percentage rather than volume of traffic. Canada's railroads have no trainload rates, which would probably be held discriminatory, and thus illegal under Canadian law. On the other hand, the Canadian roads have incentive rates which give the shipper an inducement to load in individual cars as fully as possible. These rates are considered to be in the public interest because the benefits are available to shippers of single carloads as well as to shippers with much larger volume.





Operations: The Big Speed-Up

Canadian Pacific manifest freight No. 951 operates through from Saint John, N.B., to Vancouver without changing engines, except to add or remove power to conform with ruling grades. The train leaves Saint John at 12:30 a.m., Atlantic Standard Time, Monday and pulls into Vancouver at 11:59 p.m., PST, Saturday. Eastbound, train No. 952 operates on a similar schedule.

On the Canadian National, the eastbound transcontinental manifest freight is No. 414. Running time, coast-to-coast, is comparable. On both roads, other manifest freights offer similarly speeded up schedules between almost all points. Fast freight and dependable schedules have taken precedence over holding trains for maximum tonnage. And this is true on small carriers as well as large.

FASTER OPERATION is made possible by continuing improvement programs, as on CPR's Kicking Horse Pass line.

Diesel power has made present speeds possible, not only because of horsepower that will haul heavy trains at 55 and 60 mph, but by eliminating intermediate inspections at subdivisions and cutting out many fuel and water stops. In the diesel age, both CNR and CPR are shifting away from the old organizational structure based on division points a few hundred miles apart.

CPR last May announced a coast-to-coast reorganization, which has four regions exercising direct control over the 32 operating divisions, eliminating the eight districts that had previously come between regions and divisions on the organization chart. The four regions (Atlantic at Montreal, Eastern

(*Continued on page 35*)

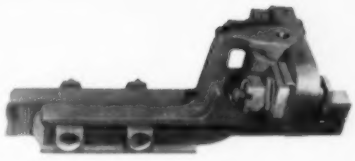
Switches last years longer with Racor vertical rods

The heavier the service, the more your turnouts will benefit from Racor vertical switch rods. These rugged rods give three advantages: they pivot, they can be adjusted, they give added support to switch points.

Whether hand, machine, or spring operated, every heavy duty switch will throw more easily and line up more accurately, with rods that pivot instead of bending. Easy, positive adjustment promotes trouble-free service —both of switch mechanism and related signaling equipment. And the added support means that the points wear more slowly and stay in adjustment longer.

Racor vertical rods are your assurance of satisfactory switch operation through the years. Your Brake Shoe representative will be glad to give you details. American Brake Shoe Company, 530 Fifth Avenue, New York 36, N. Y.

A-2942



Advantages of Racor Type MJ Vertical Switch Rod include positive engagement of rod to clip, assured by meshing serrations, eliminating wear of rod bolts and bolt holes. Big journal, with provision for lubrication, supports switch point with precision. Fine adjustment permits accurate setting of switch throw and reduction in inventory because one rod can be used in various locations.

Quality products cut your ton-mile costs

The progressive Canadian Pacific Railway
863 Piggyback Cars

now has in service equipped with COBRA SHOES

Good braking is an important customer benefit offered shippers who use Canadian Pacific Piggyback Service. Fewer sudden or jerky stops mean safer transport of both carriers and cargo. The result is an ever-increasing preference for this economically sound way of delivering freight between Canada's key distribution points.

In addition to their smoother braking performance, the COBRA SHOES on these high-demand piggyback cars are an important factor in keeping them in service. Because of the longer life of COBRA SHOES and greater wheel mileage obtained from wheels braked with COBRA SHOES, very little time is spent for shoe or wheel replacement.

The application of COBRA SHOES to its piggyback cars is but the latest indication of the Canadian Pacific's adoption of this improved brake shoe. Following its first order in May, 1956, and its successful use on an overnight compartment car on the Montreal-Toronto run, the Canadian Pacific has installed COBRA SHOES on 48 commuter cars, 22 transcontinental sleepers, 863 piggybacks, and on 115 diesel switcher and road locomotives.

COBRA SHOE installations are growing in expanding number and volume. Like the Canadian Pacific more and more railroads turn to COBRA SHOES as service evaluations repeatedly demonstrate their smoother performance and their economy through greatly extended service life.

Write for a copy of a special brochure which covers in detail the many benefits to be derived from using these truly revolutionary brake shoes.

The COBRA SHOE . . . **a product of the combined research facilities of**

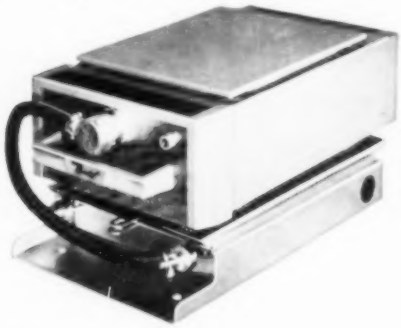
WESTINGHOUSE AIR BRAKE COMPANY
Specialists in Braking

JOHNS-MANVILLE CORPORATION
Specialists in Friction Material

RAILROAD FRICTION PRODUCTS CORPORATION *Wilmerding, Pennsylvania*

NEW BENDIX RAILROAD RADIO

transistorized . . . available in all three versions: 12V DC, 72V DC, and 117V AC



A few reasons why the 2R radio stands out . . .

- Extensive transistorization throughout receiver . . . transistorized audio section in transmitter . . . power supply completely transistorized.
- Transmitter, receiver, and power supply each contained in a separate, plug-connected chassis, thereby simplifying and speeding maintenance.
- Extensive use of printed circuits.
- Total unit weight only 30 lbs.
- Compact size, measuring just 18" x 10½" x 6¼".
- Power supply specially designed for protection against damage from surges and overloads.
- Meets AAR specifications.

Some advantages of companion SCA control unit . . .

- Provides complete local control of railroad communications units.
- Incorporates four-position channel selector switch, "L" pad volume control, transmit indicator lamp, and four-inch speaker.
- Control surface is backlighted to make all controls visible, while eliminating dangerous glare.

for complete information on the new Bendix 2R Radio, contact . . .

CNR BUYS BENDIX RAILROAD RADIO

After extensive evaluation tests, Canadian National Railways has selected Bendix locomotive radio sets and way station equipment for its Edmonton-Vancouver run—where rugged terrain demands the best in railroad radio.

Bendix Radio Division
INDUSTRIAL ELECTRONICS PRODUCTS
BALTIMORE 4, MARYLAND

Bendix
AVIATION CORPORATION

Export Sales & Service: Bendix International, 205 E. 42nd Street, New York 17, N. Y.

at Toronto, Prairie at Winnipeg, Pacific at Vancouver) report directly to system headquarters. The change was described at the time as an important step towards decentralization of headquarters authority to the regions, which at the same time gave regional officers closer contact with local business and railway activities.

Canadian National, which still has much the same centralized organization it acquired after the 1923 nationalization, has been considering an organization change for some time. The CNR study is expected to result in recommendations for some form of extensive decentralization.

Piggyback Operations

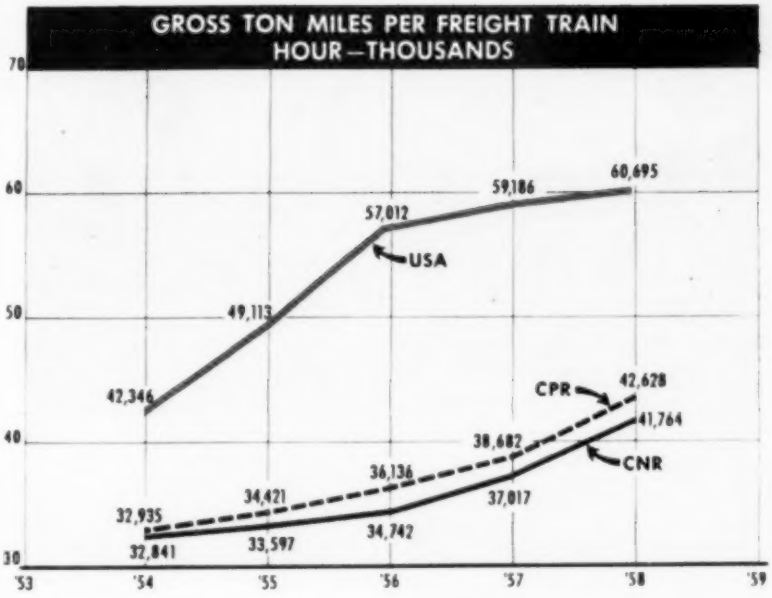
Canadian Pacific Piggyback Services in eastern Canada, and Canadian Pacific Transport Co. in western Canada, handled 61,865 trailers in 1958, making CPR the largest piggyback carrier anywhere. Plan I movement accounted for 42,000 of the total loads.

Plan I service on the CPR began October 1957 between large main-line cities, now extends coast-to-coast. CPR has had a Plan II service since 1952 operating between Montreal, Toronto, Hamilton and London in the road's highest density traffic area. The average haul, Plan I, is 415 miles, Plan II, 350 miles.

Although Canadian Pacific owns two large highway users of piggyback, Smith Transport Ltd. in the East and Canadian Pacific Transport in the West, trailers of these companies are handled like those of any other motor common carrier under Plan I. Sales thus remain the responsibility of truckmen, operations the responsibility of the CPR piggyback service.

When delivery of CPR's latest order of 300 piggyback cars is completed by National Steel Car Corp., Canadian Pacific will have 951 cars specially equipped for this service, the largest piggyback fleet on any individual railroad. The 600 cars built to CPR's own design are 46 ft long, with ACF hitches, roller bearings, depressed-center decks, steel wheels, and ride-stabilized trucks.

Canadian National began operating Plan II piggyback in December 1952 and Plan I in October 1957, with service extended to several new points since. Plan I, now predominant in cars loaded, is available between Montreal and Vancouver and intermediate points. Plan II, which is available in Toronto - Montreal - Maritimes service, was extended last March to include international piggyback between Toronto and New York.

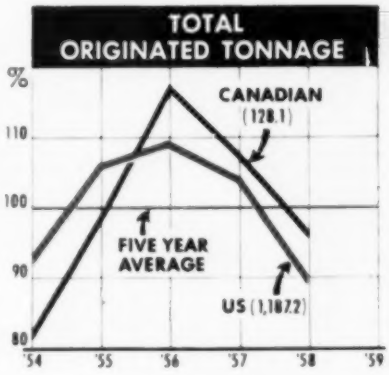


Canadian National, like the CPR, has standardized on the ACF hitch, single-trailer flat cars. Of its 706 piggyback cars, 400 were built to a CNR design developed by the road's mechanical and research departments. The 400 new cars, built by National Steel Car Corp., have roller bearings, low-alloy, high-tensile steel, welded components where possible, and a skeletonized deck to reduce weight.

Pacific Great Eastern has begun piggyback service between North Vancouver and Dawson Creek, hauling motor carriers' trailers in Plan I service to the Alaska highway. Also the road has taken delivery on the first of a number of 40-ft refrigerated, aluminum trailers for door-to-door trailerload service between Vancouver, Prince George and Dawson Creek.

During its first year and a half of service, Canadian Plan I piggyback racked up impressive carloading figures. Nevertheless, a Canadian traffic man says it has been primarily a stand-by business. He does not consider this a handicap. As the service becomes well established, he thinks, more truckers will make Plan I piggyback part of their regular operational pattern and by doing so reduce their fixed charges.

In comparing Plan I and Plan II growth, a CPR piggyback officer says, "Plan I starts with a very big potential. On Plan II for the same period, you have to build your own market. The railroad is developing both equally.



Both have a place in future CPR thinking."

Although neither the CPR nor the CNR has announced plans for Plan III or Plan IV piggyback, both railways have held exploratory talks with shippers who operate their own trailers.

Fishyback, perhaps with containers rather than highway trailers, is a likely development now that the Seaway is open. Canada Steamship Lines, which owns the large Kingsway Transports, is a good bet to become the first fishyback operator.

On containers, Canadian Pacific is working on a standardized container for international service—and has its third design for this device on the drafting tables. The present design, if it goes into production, will move on a 46-ft car that will handle containers on either end, utilizing side loading as in the Flexi-Van designs.

Challenge of Passengers—p. 36 ►

NO HIGHWAYS makes this AC&HB train a necessity, even in an area with few riders. Highways are coming, though.

Challenge of Passengers

A Canadian National passenger officer says, "First of all, we're not sold on the idea you can't make money out of the passenger business. We know you can't make money out of it the way it's been run—to our sorrow—and the next step is to find out what *can* be done."

To get the statistics on which parts of the passenger business are hopeless and which show promise of life, CNR has worked out a machine-accounting procedure utilizing conductors' reports from every train. From this it hopes eventually to get a fair picture of each train's earning powers. Currently under study are procedures for extending the same system to express.

As in the States, passenger business is declining. CNR in 1958 reported a sharp drop in number of passengers, resulting in a decrease of 11.4% in passenger revenues. Canadian Pacific reported a corresponding decline in passengers from 8 million to 7.7 million, down 3.6%, and a drop of 8.4% in passenger revenue.

Passengers: the Future

The future of passenger service in Canada, in spite of 1958 results, is not necessarily dismal, at least according to public statements of the chief railroad officers. CPR President Crump, commenting on 1958 results, said he thought CPR's dome trains and RDC fleet had brought business back to the road. He added, "Unlike some American railways, we are very happy to have the passenger aboard . . . We have done a great deal of careful planning, engineering and construction to assure the passenger of the most comfortable ride possible . . . and I think for years to come we'll still be interested in the passenger service, and after that it may well be . . . some form of integrated service [between rail and air]."

Speaking for the Canadian National, President Gordon told the Sessional Committee, "We are quite prepared to continue the passenger business as long as there is economic justification for us to do so. We are intensifying our efforts in an attempt to keep passenger business, sprucing it up and seeing to what extent the public will support and help the effort. If the public responds, we will stay in the passenger business. But if the public does not want it, there is no satisfaction in keeping the trains."

"Some of our passenger business," Mr. Gordon continued, "is profitable business. Our main lines generally, I would say, would pay the costs. There are a number of trains in various areas which provide a mixed service. These are runs that are often candidates for abandonment and we have every one under investigation. We intend to make applications for abandonment whenever we can make the situation stand up under that kind of analysis."

Although both roads have the same goal—weeding out the hopeless lines and restoring profitable runs to a profitable basis—the two passenger services appear to be approaching the goal from different directions.

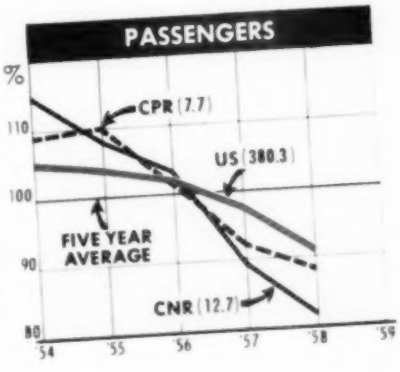
The transcontinental trains that head each road's passenger fleet are an example. CNR's standard bearer, the "Super Continental," lost status last year when the road proposed dropping it as a through train and replacing it with intercity trains for which demand remains high. The proposal was quickly dropped in the wake of strong public protests. And the "Super Continental" has remained in service as a limited-stop, luxury train. In continuing the train, CNR is making a strong bid for two kinds of traffic: passengers seeking a high-quality economy service as well as those who want first-class luxury service. With this in mind, CNR advertises tourist-class duplex roomettes on the "Super Continental" (available for coach fare plus a reduced roomette charge, these are the only coach-class private room accommodations in Canada).

Also featured on the CNR transcontinental trains are low-cost coffee shops, cafeteria cars and dinettes, as well as standard diners. Standard tourist sleepers and long-distance coaches make up a large share of equipment on the other transcontinental trains of both roads. Particularly in the summer, these are heavily patronized.

To many Canadians, the CPR, though it also provides low-cost meal services and tourist equipment, is better known for its luxury services, and particularly its dome cars, which are available to coach and first-class passengers on both of the road's transcontinental trains.

Mr. Gordon has commented on the different approach of CPR and CNR as reflected in their equipment, in these terms. Speaking in 1959, Mr. Gordon noted that in 1954 when the CNR embarked on its passenger equipment program, it was decided there had to be "a substantial expenditure in the rehabilitation of passenger equipment." CNR had placed no major passenger equipment orders for about 20 years.

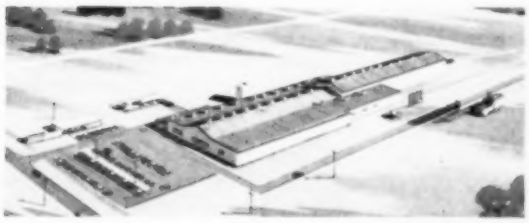
(*Continued on page 38*)



MADE IN CANADA FOR CANADIANS

A dominant factor in Canada's industrial growth has been the progressive attitude of its railroads, ever-ready to meet the needs of an expanding economy. Keeping in step with Canadian progress, Griffin was the first company to produce steel wheels in Canada, initially at St. Hyacinthe...and now at Transcona, as well, to serve Western Canada. The Griffin EQS Wheel *costs less per car mile.*

St. Hyacinthe Plant



Transcona Plant

GRIFFIN EQS
ELECTRIC QUALITY STEEL

In Canada: GRIFFIN STEEL FOUNDRIES, LTD.,
St. Hyacinthe, Quebec · Transcona, Manitoba
GRIFFIN WHEEL COMPANY, 445 N. Sacramento Blvd., Chicago 12, Illinois

and the road had to plan to spend about $50,000,000 to bolster passenger service. "We came to the conclusion," Mr. Gordon continued, "we would be better off to spread that $50,000,000 as widely as possible and we did not feel that the dome car had enough traffic potential to justify the expenditure."

Of Canada's smaller roads, the Ontario Northland caters strongly to passengers since it feels it would have to run express and mail trains, anyway, and it should get all possible profit from them. ONR passenger business had held fairly level for the past six or eight years, and summer passenger traffic is improving.

On the Algoma Central, passenger traffic revenue is slightly more than 3% of total revenues. Passenger traffic has been important to the territory, though, because of the absence of highways in the region. The road expects passenger service to decline when the highway around Lake Superior is completed early in 1960.

Passenger service on the Pacific Great Eastern is growing. There is particularly strong summer demand from tourists for space on the RDC's to Prince George, a route with great scenic attractions.

In their efforts to create new business and hold old business, CNR and CPR jointly put into effect October 2 a plan for reducing fares for group travel and a separate package plan that sells transportation, berths, meals and even tips as a single item for a single payment. CNR, in announcing the plan, said it carried out the recommendations of its market research study of Canadian travel habits and attitudes.

Both major Canadian roads (and the Ontario Northland) have benefited from the decline in passenger business in the States to the extent of making some advantageous purchases of surplus U. S. equipment. The CNR picked up 32 modern sleeping cars from the New York Central. The CPR got four post-war sleepers and four buffet-observation cars from the same road, and the ONR acquired three stainless steel coaches from the BAR (and could use six more of them at the same price).

The Budd Co.'s RDC units have taken over a fair share of Canadian passenger miles. Canadian Pacific has 55 RDC units, 10 of which were built in Canada by Canadian Car Company under licensing agreements with Budd. CPR, which uses the RDC's on all parts of the system from Nova Scotia to Vancouver Island, is second only to Boston & Maine in the size of its RDC fleet. Canadian National has 32 RDC's, and Pacific Great Eastern has seven in service between North Vancouver and Prince George. Seats on these trains are reserved for a small extra charge, and free meals are served.

Perhaps the most significant factor in the future of passenger business, though, is a freight operation. Starting October 1958, CPR began moving trailers on flat cars in passenger service between Winnipeg and Fort William. Ten cars were equipped for this service, allowing five cars each way each day. Particularly in the West and in the Maritimes, where piggyback demand is strong and passenger runs tend to be of light density, a piggyback-passenger combination could make a difference in a decision to keep routes that might otherwise be dropped.

End of an Era—Diesels Take Over

STEAM POWER has been forced to sidings by rapid dieselization, as here on the Canadian National, and will vanish next year.

In 1958, diesels outnumbered steam motive power on Canadian roads for the first time, 2,779 units to 1,960. Although CNR and CPR have been approaching dieselization from different directions (on the CNR from individual services; on the CPR, complete regions) both should reach 100% dieselization late in 1960 or early in 1961. By fall of 1959, steam engines were a rare sight on the main lines.

Canadian National, which had 1,746 diesel units at the end of 1958, was one of the first American roads to experiment with diesel-electric propulsion. The road operated a diesel rail car in 1925, and put a 1,200-hp, two-unit diesel-electric road locomotive in service in 1929. Early models of CNR diesels came in a variety of sizes and shapes from numerous builders. In recent years, as it stepped up its diesel program, CNR has been ordering chiefly road switcher and switcher units.

Canadian Pacific received its 1,000th diesel unit this fall, a 1,000-hp switcher from Montreal Locomotive Works. CPR's first diesels, yard switchers built in the United States, were acquired in 1943.

The first section of the CPR's 17,000 miles of line to be completely dieselized was the Esquimault & Nanaimo, a wholly owned subsidiary on Vancouver Island, which operated its last steam locomotive in 1948. At the time the CPR diesel program is completed, the road will have some 1,200 diesel units, costing $250,000,000.

Both Canadian National and Canadian Pacific are getting new units this fall designed to meet branch-line specifications. CNR recently took delivery of the first of 68 1,200-hp road switchers from General Motors Diesel, Ltd., and promptly placed an order for an additional nine units. Although all the locomotives are designed for branch

service, 18 have 89-mph gearing, steam generators, and four-wheel trucks for passenger use. The others have 65-mph gears and six-wheel trucks.

Montreal Locomotive Works has delivered the first unit of an order of six 1,000-hp road switchers for Canadian Pacific branch service. CPR has also acquired seven diesel-hydraulic, 500-hp switchers from Canadian Locomotive Co.

In diesel maintenance, Canadian Pacific, at its Angus Shops in Montreal, has a process for reclaiming worn traction motor gears from diesel electric locomotives by regrinding worn gear teeth to correct profiles. Between March 1958 and mid-'59, over 500 gears had been reclaimed. The next step, CPR says, may be to reclaim worn pinions as well.

The Firemen Agreements

As the percentage of freight hauled by steam power continued to drop, railroads became increasingly interested in the possibilities of operating diesel units with only two men in the cab. The Canadian Pacific was the first to act. Early in 1958, CPR declared its intention to put into effect the Report of the Kellock Royal Commission which had found that firemen were not required on CPR diesels in freight and yard services.

After two short strikes by the BLF&E, CPR signed an agreement with the union providing that firemen would gradually be replaced in freight service (where the head brakemen would make a second man in the cab) and in yard service (where the switching crew is available).

The CPR-BLF&E agreement provided that no firemen would be replaced whose seniority dated from before April 1, 1956, but that no new firemen would be hired to replace vacancies that would occur.

From June 1, 1958, through August 31, 1959, CPR operated 17,504 yard assignments and 3,488 diesel freight assignments without firemen. "Operation of freight and yard diesels has been completely satisfactory from every standpoint. Operations have proceeded normally without adverse experience in respect to safety, mechanical performance, carrying out switching operations, or any other aspect," CPR states.

CNR signed a comparable agreement with the BLF&E last May. In August it reported that over 1,000 yard assignments and 150 road freight assignments had been operated without firemen up to that time. These operations were in strict accordance with the agreement, which says that every fireman available will be used before a run proceeds without one.

SPECIALIZED PASSENGER CARS are turning up too. ONR shops are converting this hospital car for cafeteria service.

An Age of Specialization

In Canada as in the States, there is increasing demand for specialized equipment to handle particular traffic. Both major Canadian roads are acquiring growing stables of special cars. Of 1,464 cars CPR ordered early in 1959, 950 were specials: 150 covered hoppers, 500 dual-purpose automobile cars, and 300 flat cars for piggyback service. Canadian National's 1959 orders for 1,780 cars include 600 specials: 200 heated and insulated box cars, and 400 piggyback flat cars.

CNR has put in service 150 new 75-ft automobile transporters, which the road has found to be very popular with automobile manufacturers. These are a double-deck design set up to carry 10 European-size autos and either six or eight American-size, depending on internal arrangements. The cars will also carry yachts, and one did, for Prince Philip when the Royal Party toured Canada last summer.

Canadian Pacific has its own approach to auto transport, a 50½-ft car designed to carry autos in one direction, and grain (or other freight requiring clean cars) in the other. The road has received 500 of the dual-purpose units from Canadian Car Co. The same idea has also turned up in a prototype "Car-A-Van" successfully tested by CPR subsidiary, Smith Transport. Car-A-Van is a 40-ft piggyback trailer that can be used to move autos west and load merchandise freight for the return trip.

A special car concept used extensively on U. S. roads—the damage-reducing car—has not yet appeared in Canada. Both major roads appear reluctant to make the necesary investment in special fittings unless the move is forced by competition, and to date it has not been. Cars from the States arriving with damage-reducing equipment have been returned promptly and directly.

There may be a policy change in the works, however. A new company, D-F Loaders, Ltd, of Montreal, has been formed to lease D-F equipped cars to Canadian railways at a fixed monthly rental fee. D-F Loaders plans to trace the cars itself and will assist in returning cars to home lines or to designated points. The firm will also assume responsibility for maintenance and repair and car assignments.

Both Canadian National and Canadian Pacific have new insulated and heated box cars in service, and both are well-pleased with them. These cars

operate like conventional box cars in summer and use underslung, charcoal heaters, similar to those used for refrigerator cars, when heat is needed. Because the cars need no cooling systems, they are much larger than the conventional refrigerator cars they replace in many kinds of service, and are also cheaper to build.

CNR tested five aluminum reefer cars last winter and describes them as successful, although no decision has been made on building more of the type. Roberval & Sagueney has had 30 all-aluminum hopper cars in service for two years, recently got conditional approval from the AAR for interchange service on U. S. roads.

The major difficulty the Canadian roads experience in car supply is a serious one over which they have little control—the problem of getting Canadian cars returned promptly from U. S. points. Chief cause of the trouble seems to be the fact that Canadian cars carrying export goods for the States are clean, high-quality cars of the classification generally in shortest supply in the States. Because the Canadian roads are transcontinental roads, with interchange points all across the continent, there is a tendency for cars to be routed home by excessively long routes that keep them away from their point-of-origin territory an excessively long time.

There tends to be a continuous imbalance between Canadian cars in the States and U. S. cars in Canada, running to about 25% more Canadian cars out of the country than U. S. cars in. An increased per diem rate would help correct this imbalance, according to the CPR. So, it adds, would a tighter interpretation and implementation of car service rules requiring return by the most direct route possible. For the most part, car supply was adequate this summer on all roads.

On per diem, the big owners, CPR and CNR, generally felt the $2.75 rate was too low, while the smaller AC&HB, ONR and PGE seemed satisfied with the present level.

Roadways Speed Freight

One of the striking things about a summer trip across Canada on either transcontinental road is the vast amount of trackwork going on. Almost every siding has its quota of red-painted camp cars and work equipment: cook cars, dormitories, family cars, tool cars, etc. And most of them are occupied.

The work trains are part of a continuing effort by Canadian railroads to bring their trackwork and roadbeds up to a level of efficiency comparable to that of the diesel locomotives. First main track mileage in Canada at the end of 1958 was 44,125, an increase of 235 miles over the 1957 year-end mileage of 43,890, but much of this track, especially off the main lines, is restricted as to speed and loadings.

MECHANIZED TRACK GANGS are busy all summer. This is part of 1,960 miles of line CNR is upgrading for high speeds.

Upgrading Track

CNR has been busy this summer with a track improvement program running west from Armstrong, Ont., to Vancouver, with 1,960 miles of main-line single track and 675 miles of secondary main-line track (from Red Pass Jct., Alta., to Prince Rupert, B. C.) affected. East of Red Pass Jct., new 115-lb steel is being laid; west, through the mountains on both routes, 100-lb steel. Crushed rock ballast from quarry rock is being used where available.

CNR is laying rock-ballasted, 115-lb welded rail in selected locations on the transcontinental main line. Welded rail is also going into CNR's hump yards.

CTC installations on the Canadian National in 1958 were begun on four subdivisions, and an additional five subdivisions have been initiated in 1959. The long-range CTC program will eventually include 40 subdivisions and some 4,000 miles of main-line track. About 1,800 miles are expected to be completed by the end of 1959.

Canadian Pacific's 1959 track program calls for 216.5 miles of new 100-lb rail and 66.9 miles of new 130-lb rail, with about 318 miles of relay rail in various weights. Crushed rock, crushed gravel and gravel ballast is being added to some 650 miles. Clearances are being improved in 39 tunnels, including one that has been daylighted to accommodate piggyback movements. The two spiral tunnels, near Field, B. C., are being relined in concrete and enlarged for better tunnel clearances.

CPR's signal program for 1959 includes APB signaling on 96 miles of single track between Trenton and Agincourt, Ont., and 42 miles of CTC between Trenton and Port Hope. CTC is also being installed on 25 miles of present double track between Revelstoke and Taft, B.C., which will be converted to single-track operation. Between Moose Jaw and Swift Current, Sask., 66 miles of a 110-mile double-track line are being placed under CTC

in 1959, with the remaining portion scheduled for the near future.

On certain jobs, particularly track maintenance, tracklaying and ballasting, CPR has achieved what its engineering department considers startlingly good labor efficiency and economy. Labor costs for ballasting, for example, are lower than they were 15 years ago. To get these results, CPR had special tools developed and reorganized its gangs for best efficiency. The fully mechanized ballast gangs use a plow which, pulled under the tracks by a locomotive, effectively skeletonizes the track. The gang then puts ballast down and pulls a second plow under the track to distribute ballast. With an ordinary-size gang, about a mile of track a day can be completed.

Ontario Northland's track program calls for about 30 miles a year of crushed rock ballast and a continuing program to install creosoted ties, which it expects to complete over the entire line in about two years. ONR is also adding about 30 miles of absolute block signals a year, which will be converted to CTC later.

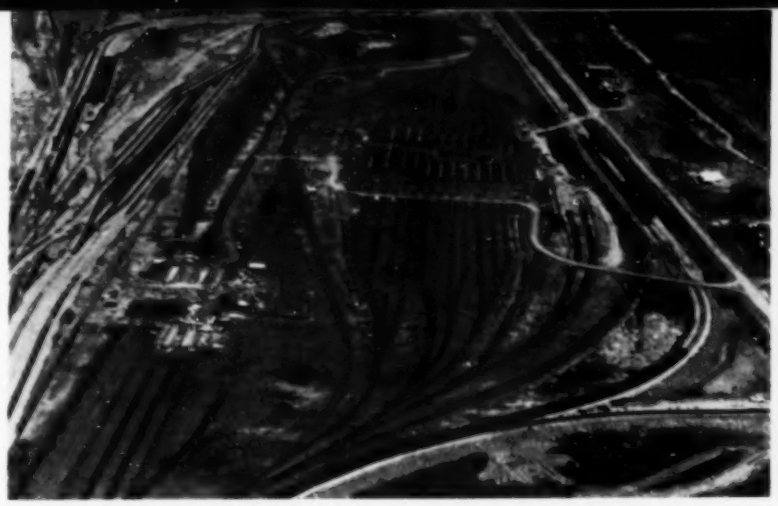
AC&HB Tie Treatment

Algoma Central, which adopted the cycle system of maintenance three years ago, says it is working out very well. AC&HB secures its annual tie replacements (about 60,000 ties) from a company-designed plant using the "Osmose" method of treating jack pine and spruce ties. The Osmose process, combined with bundled handling methods, gives the AC&HB what it considers worthwhile savings over pressure treating and handling methods. The Osmose method, a chemical, non-pressure treatment, boosts jack-pine tie life to 12 to 18 years. To get the same annual cost per tie from a pressure-treating plant, AC&HB figures it would have to get a minimum tie life of 33 years, a doubtful goal for jack pine in Ontario.

Train radio is improving operations in several Canadian locations. Ontario Northland, which is proud of its modern communications setup, is fully train-radio operated, with a radio and walkie-talkie in every engine and a radio in every caboose. About 30 miles of line have a dispatcher-talk system. Microwave is being installed to replace a long-distance pole system.

Pacific Great Eastern train radio is operated via the line's microwave installation, which covers the entire 790-mile route.

Canadian Pacific is installing train radio on the main line between Calgary and Vancouver for freight operations. Canadian National freight service in the western area will also be getting train radio soon. Tenders for bids have gone out to interested manufacturers.



PUSH-BUTTON RAILROADING will be a feature of CNR's new hump yard at Montreal, expected to be in service in 1960.

The New Look

A man intimately connected with transportation problems but not employed by either of the two big roads, says the current yard construction programs represent two equally valid but distinctly different forecasts of future development. CNR, he says, is gambling that its investment in automatic yards will pay off, and it will if freight continues to move in the prevailing patterns. CPR, on the other hand, has a more conservative program and before authorizing completely automatic yards will wait to see if Canadian piggyback will reduce the need for conventional transfer yards. Canada, this man points out, is primarily a one-dimensional problem (east-west movement) compared to the States (which have movements into yards from all points of the compass).

Putting conjecture aside, it is true that CNR has a more extensive yard program than CPR. The Canadian National has scheduled construction of completely modern automatic yards at Montreal, Moncton, Winnipeg and Toronto.

Symington Yard in Winnipeg is typical, though it will not be the first completed. Covering 628 acres, this will be a completely modern electronic yard, with TV, radio and communications accessories. It will be able to handle 7,000 cars a day. Standing capacity of 6,927 cars is capable of expansion to 10,824 cars when needed. There will be two hump tracks to handle two trains simultaneously. The entire yard area will be floodlighted for 24-hour operation. Construction will be completed in 1963, with the total cost about $24,000,000.

Symington will replace an inefficient hodge-podge of yards inherited by the Canadian National in the 1923 nationalization merger.

CPR has been given approval by the Board of Transport Commissioners to go ahead with its plans to build a $17,000,000 hump yard at Agincourt, Ont., to serve Toronto. CPR expects to finish most of the work on the yard in 1961. It will cover 400 acres and will hold 10,000 cars on 123 tracks.

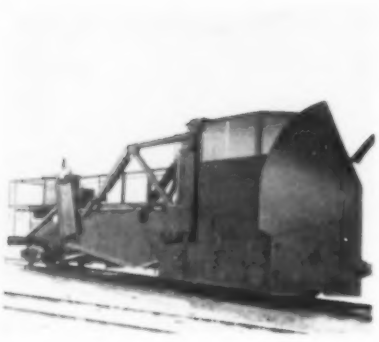
Grading operations have begun for a new CPR marshalling yard at Lancaster, N.B., to make for better winter operations through the port of Saint John. This will be a 2,000-car yard.

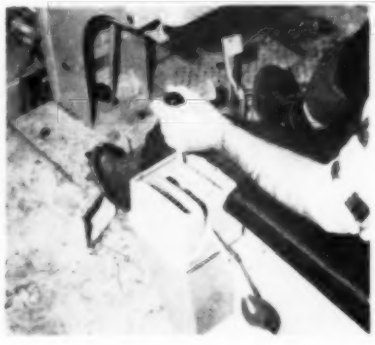
CPR's Winnipeg Terminal

Canadian Pacific's yards at Winnipeg handle the major task of sorting CPR's big grain traffic for eastern and export markets. Winnipeg yard and terminal operations have been extensively improved with the help of modern communications. There is selective radio for communications between the yardmaster and locomotives. Cab signals for helper units as well as radio carrier and voice circuits are also provided. The system, which is fail-safe, has eliminated the hand-signal problem when switching on a curve.

Canadian Pacific will install CTC for train movements through the Winnipeg terminal area. With the two-way radios on yard engines, the railway estimates that crews will be able to spot cars at customer's sidings in half the time now required, and all traffic will move through Winnipeg 30% faster. Radio is also being used for the checker staff of industrial yards, with radio-equipped automobiles for local freight men to keep in constant touch with the freight office.

New Products Report





Spreader-Ditcher

In addition to the Jordan line of pneumatically operated spreaders, spreader-ditches and snow plows the company has announced a new series of hydraulically operated models. The new machines incorporate a 2000-psi integral hydraulic system which includes diesel-engine-driven twin pumps. The pumps provide pressure to a split-type, all-hand-operated manifold located in the control room which is placed in a forward position on the machine. Uniformly smooth and positive response is said to result when the operating controls of the spreader-ditcher are actuated. The unit is equipped with quick-acting sliding ditch sections which are claimed to extend from, or recess into, the ditcher template wings in less than five seconds. In addition, the wings have been lengthened and strengthened to provide larger roadbed cross sections and each has been equipped with adjustable ballast scarifying bars for handling cemented ballast. *O. F. Jordan Company, Dept. RA, East Chicago, Ind.*

Brake Regulator

The Model No. 1340 brake regulator is a double-acting, fully automatic brake regulator designed to maintain a preselected piston travel at all times. Adjusting is done as the brakes are applied, and this adjustment is made instantly and completely, regardless of the wear, number of shoes lost or replaced. Shoes can be replaced without touching the regulator. No manual manipulation is required either to replace the shoes or to re-establish piston travel; the regulator will insure correct piston travel on the first air or hand-brake application. It does not cycle or measure wear on one stroke and then correct it on the next or succeeding strokes. The device is lubricated for the life of an air-brake cleaning period, likewise tested to operate at 100-lb pressure on a 12-in. cylinder. It will not slip under impact. The regulator is of all-steel construction. It does not reduce the air-brake force on the rigging more than allotted by the AAR and is covered by AAR Certificate No. 6. *Ellcon-National, Inc., Dept. RA, 30 Church St., New York 7.*

Power Shift Transmission

One range selection lever takes the place of three with the power shift transmissions now available on Caterpillar's D8 and D9 tractors. Heart of the new transmission is a planetary gear set, driven integrally by the engine flywheel, which transmits ⅓ of the engine torque directly to the transmission input shaft and the remaining engine torque through the torque converter. A single range selection lever replaces the flywheel clutch lever, gear selection lever and forward-reverse lever used on earlier models. According to the manufacturer, only a fraction of a second is required to shift the power shift transmission, compared to a shift time of up to several seconds for standard transmissions. The new transmission (three-speed forward, three-speed reverse) consists of five in-line gear trains, each with a separate clutch. Two of the planetary trains are directional; three constitute the low, intermediate and high gear ranges. *Caterpillar Tractor Company, Dept. RA, Peoria, Ill.*

Phosphating Compound

Turcoat Low Temp, a zinc phosphating compound, operates at a temperature as much as 75 deg lower than that required by conventional processes. Operated at 95 deg F, it provides a paint-gripping coating on iron, steel or zinc equal to those provided by processes requiring temperatures of up to 180 deg. F. It can be applied by immersion or spray washer. *Turco Products, Inc., Dept. RA, 24600 S. Main St., Wilmington, Cal.*

Exothermic Welded Bonds

The Tigerex type XA-2 signal bond is applied to the rail by means of exothermic welding. The bond generates its own heat by chemical reaction. Equipment required for installation is held to a minimum and no special skill or training is required on the part of the operator. It is designed for installation with standard equipment. *American Steel and Wire, Division of USS, Dept. RA, Rockefeller Building, Cleveland 13, Ohio.*

Yard Control System

A low-cost yard control system which provides control and indication of switches and signals and detector or time locking is available. The system uses ac for control, rectified ac for indication, and requires four wires per switch and three per signal. Control and switch machines, signals, relays, rectifiers, transformers and housings are also available. *Transcontrol Corp., Dept. RA, 2 Yennicock Ave., Port Washington, N. Y.*

Rail-Related Issues Face Voters

Issues directly or indirectly involving railroads will go before voters in New Jersey and New York this week.

In New Jersey, voters will decide on Gov. Robert Meyner's plan to divert Turnpike profits to aid commuter railroads and other forms of public transportation.

In New York, the electorate will decide if it wants to authorize the state legislature to transfer the 527-mile New York Barge Canal System to the federal government.

Governor Meyner has proposed to divert an estimated $570,000,000 in excess funds from the New Jersey Turnpike over the next 28 years to be used for transportation purposes (RA, Sept. 7, p. 13). The referendum would permit the state to place its credit behind $430,000,000 in Turnpike bonds outstanding, subject to approval of the bondholders.

Substantial opposition is centered in populous Hudson County, where the Democratic organization has ignored the pleas of Governor Meyner, a Democrat, and is conducting an all-out campaign to defeat the referendum. The county has appropriated $50,000 for this purpose and has enlisted bi-partisan support.

Hudson county communities receive a substantial percentage of the taxes collected in New Jersey from the railroads (about $11,000,000 a year from non-mainline properties alone, more than two-thirds of all such taxes collected in the state). The county is therefore afraid of the clause in the referendum that suggests that some of the diverted funds be used to provide tax relief for rail lines. Political leaders in the county have demanded a constitutional amendment to guarantee their rail taxes.

The governor has insisted that no community would be deprived of revenue as a result of the referendum.

Meanwhile, Amendment No. 6 on the New York ballot will determine the fate of the 134-year-old Erie Canal and its companion waterways. Those in favor of the amendment say approval would clear the way for the federal government to take over its operation and ultimately to spend $500,000,000 or more in enlarging and modernizing it, although there is no indication from Washington that the government would do this.

Water carriers and some shippers would like to see the system modernized to improve their competitive positions. If the barge canal remains in the hands of the state, it is likely to remain in its present condition for a while longer. Among those organizations opposing the amendment is the New York State Association of Railroads.

Railroading After Hours with Jim Lyne

ANOTHER BURLEYCUE TARIFF—A couple of weeks ago I mentioned here a 1931 tariff burlesque job, apparently perpetrated by T&P's J. B. Shores. Now, J. A. Bliss of East Greenbush, N. Y., sends me "Muffed Rate Tariff No. 1." It bears no date, but has the imprint of Comet Printing Service of Kansas City.

After calling for a lot of complex computations, the tariff says that, at this point, "the rate expert, who is a union man, calls it a day and the shipper calls a truck." However, a note indicates that finding out what the applicable truck rate is, is just as hard a job as finding the applicable rail rate. Mr. Bliss says, maybe the perplexed shipper doesn't call a truck; maybe, instead, he *buys* one. That would make a difference.

FOR FANS OR TOURISTS?—I knew very well, when I referred here to 2-ft gage as hardly constituting a real railroad, that some loyal fan would file a protest. I was not mistaken. Charles E. Whitmarsh of Mishawaka, Ind., has taken me to task for my ignorance.

Mr. Whitmarsh also objected to my reference to the operation of some narrow-gage lines as "tourist attractions." He insists that there is a substantial difference between railfans and tourists—the difference being that the interest of the latter is casual, but the fan really means business. "Where," asks Mr. W., "would you find a tourist who would pay $5 for an old timetable—or take long trips, even to Europe, just to broaden his experience of railroad riding?"

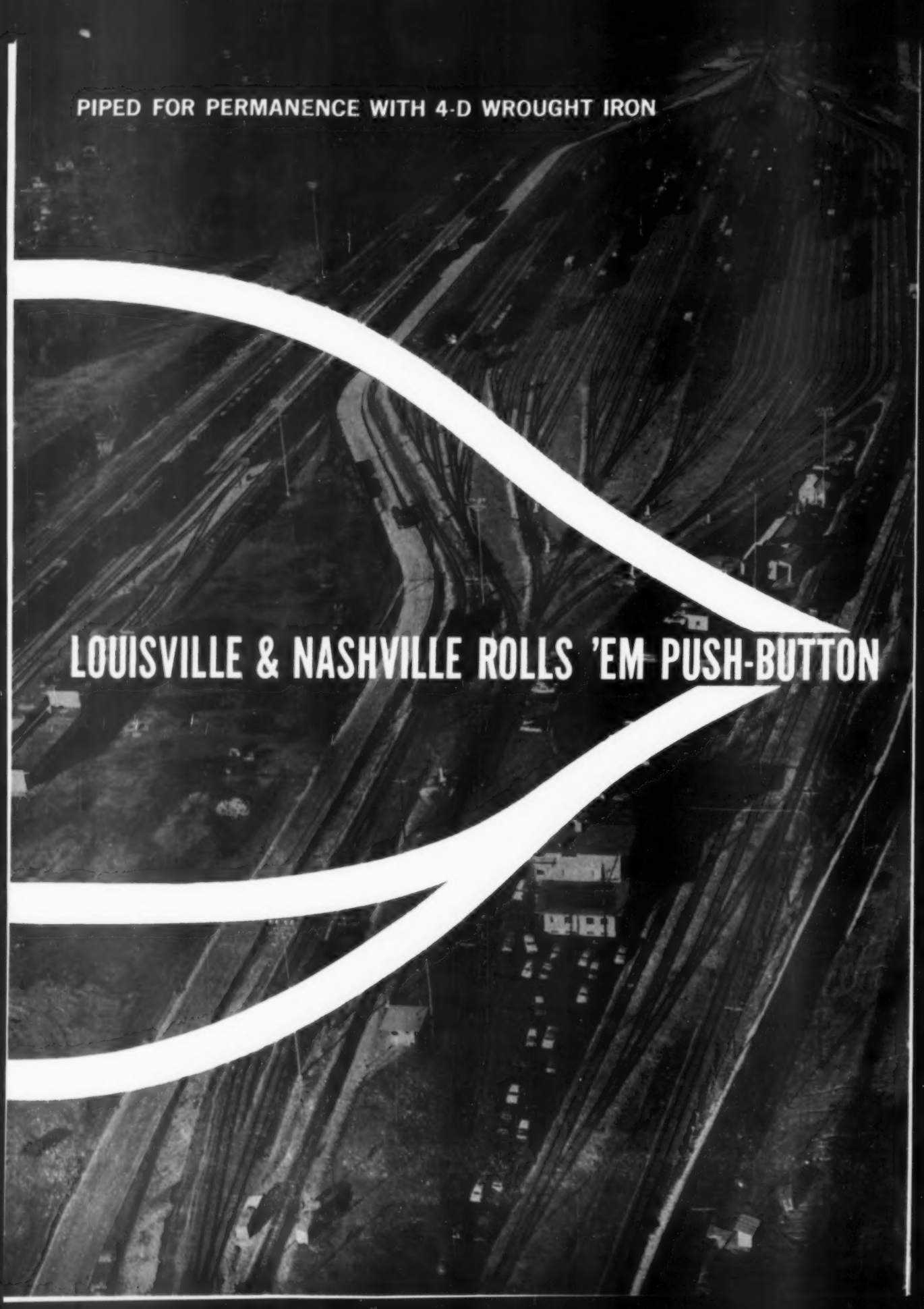
I am about as interested in railroads, I suppose, as anybody could be—but, for the most part, in aspects other than the antiquarian things most fans enjoy. I don't begrudge them their zeal though. I wish there were 10 million more of them.

LEFT-HAND OPERATION—A banker friend of mine queried a picture in one of our recent issues, in which we showed a Santa Fe train operating on the left-hand track through Cajon pass. I felt sure the picture was correct, but consulted the thesis on the Santa Fe, written some years ago by Trainmaster Jack Barriger—in which he records the Santa Fe's policy of determining the direction on the second main track by looking for the easiest grades.

It has been my observation that the general rule of railroad operation on the right-hand track is by no means slavishly followed, in spots where lefthand operation would impose easier gradients.

MOST EFFICIENT RAILROADS? — Lee Spencer of Scottsdale, Ariz., a retired maintenance officer, has just been up in Quebec—on the QNS&L and the Quebec Cartier. He writes with great enthusiasm about the pioneering spirit he observed on those roads—and their zest for discovering new and better ways of railroading.

I had the idea long ago that these new railroads have a rare opportunity to show the world what the real "inherent advantages" of railroads are—and, it appears, that's the way it's likely to turn out. We get cost comparisons all the time of older railroads with brand new highways, and even then the railroads are ahead. When the comparison is with brand-new, heavy-duty railroads—that should really be something.


PIPED FOR PERMANENCE WITH 4-D WROUGHT IRON
LOUISVILLE & NASHVILLE ROLLS 'EM PUSH-BUTTON

L & N uses nearly 100 tons of 4-D Wrought Iron here to counter constant vibration and corrosive attack: in car retarder piping, oxygen and acetylene lines, oil lines and air lines.

It takes tons of quality piping to run a railroad.

Just *any* piping won't do. Especially when there's corrosion to combat. Fatigue stresses to check. And cost per foot per year to consider.

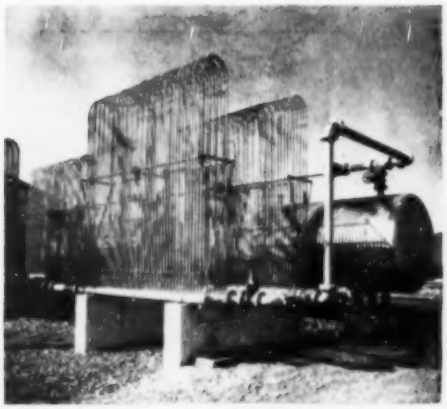
All of these things considered, the L & N chose 4-D Wrought Iron Pipe. The L & N should know. They spent almost $10 million on their new classification yard in Boyles, Alabama. It's efficiently modern. Materials of construction are top-notch.

In addition to the common-sense outlay for 4-D Wrought Iron Pipe, here are some broader areas of the L & N investment: a receiving yard of seven tracks, holding a total of 996 cars; classification yard of 40 tracks, holding 1,509 cars; a departure yard of 10 tracks, holding 1,232 cars; storage tracks, 65 in number, holding 2,348 cars.

4-D's pure base metal is laced with countless thousands of glasslike iron silicate fibers to give it excellent resistance to corrosion and fatigue stresses. Put this money-saving metal to work on your road. Our booklet, *Wrought Iron for Railroads* tells you where and how. Write for your copy. A. M. Byers Company, Clark Building, Pittsburgh 22, Pennsylvania.

STYLE IN NEW $10-MILLION CLASSIFICATION YARD

Hopper leaving master retarder in L & N's Boyles Yard on its way to the classification yard. 4-D Wrought Iron Pipe, running through the middle of the track, springs the retarders into action to slow freight cars. 4-D Wrought Iron galvanized compressed air lines run outside the retarders.



Cooling tower piping was fabricated from galvanized 4-D Wrought Iron Pipe. 4-D Wrought Iron air retarder air line pipe runs also lead to this tower. Corrosion-resistance and an ability to form leak-proof joints were cited as 4-D Wrought Iron's spec-winning qualifications.

◄ View from the air of Louisville & Nashville Railroad's new Boyles Yard near Birmingham, Ala. shows classification yard and several of the main buildings.

BYERS 4-D WROUGHT IRON

IN CANADA:

Montreal 25, Quebec
2015 Mountain Street
Phone: VIctor 2-5621

Toronto 5, Ontario
11 Yorkville Avenue
Phone: WAlnut 2-3154

Winnipeg 9, Manitoba
Group Box 4, University Blvd., East
Phone: HUdson 9-3826

Work-Rule Demands

(Continued from page 17)

between employees from the seniority districts affected.

(b) Before a run is established under the provisions of this rule which the carrier does not now have the right to establish without agreement with its employees, and which involves both the establishment of a new home terminal for the class of service involved and operation through an established crew terminal or terminals for such class of service, the carrier shall give notice to the general chairman of its intention to establish such run and the carrier and the general chairman shall endeavor to agree within 30 days upon such other conditions not inconsistent or in conflict with the provisions of paragraph 1 of this rule upon which such proposed run shall be established. In the event the carrier and the general chairman cannot so agree on the matter within 30 days, then the dispute will be submitted to arbitration in accordance with the procedure provided for in Sections 7 and 8 of the Railway Labor Act, as amended, with the limited authority to decide what conditions shall be met under this sub-paragraph (b) by the carrier, if and when such run is established.

3. All agreements, rules, regulations, interpretations and practices, however established, which conflict with the above shall be eliminated, except that existing rules and practices considered by the carrier to be more favorable are preserved.

Combination of Road and Yard Service

A. Except as hereinafter provided, eliminate all agreements, rules, regulations, interpretations and practices, however established, applicable to any class or grade of train, engine, yard or hostling service employees, which

(i) prohibit or impose restrictions upon the use of passenger crews to perform switching or station work in connection with the cars of their own trains, or to handle the light engine or engines of their own trains,

(ii) prohibit or impose restrictions upon the use of road crews in other than passenger service to perform any and all switching and station work, whether or not such switching or station work is in connection with the cars of their own trains, or to handle the light engine or engines of their own trains,

(iii) prohibit or impose restrictions upon the use of yard crews to perform road work, or to perform service outside of switching limits,

(iv) provide for arbitrary payments, special or constructive allowances or penalty payments to any employee, or class or grade of employees, when road or yard crews perform any of the work described above, or

(v) prohibit or impose restrictions on the right of management to designate or change switching limits or to establish or abolish yard or hostling service or yard or hostling service assignments.

B. Establish a rule to provide that

1. Passenger crews will perform any and all switching and station work in connection with the cars of their own trains as may be required of them at their initial and final terminals and at all intermediate points, including the clearing of any track or tracks and the shoving and coupling of cars on any track for the purpose of handling the cars of their own trains, and the handling of the light engine or engines of their own trains; and in the performance of such work will handle cars of other than their own trains as may be required, including the respotting of displaced cars. Road crews in other than passenger service will perform any and all switching and station work as may be required of them at their initial and final terminals and at all intermediate points, including the handling of the light engine or engines of their own trains, whether or not such switching and station work is in connection with cars of their own trains. When switching or station work is performed by road crews as provided herein, such work shall be paid for as a part of the road day or trip and additional compensation for such work shall not be paid under either road, yard or hostling rules or regulations. The provisions of this paragraph 1 shall apply whether or not yard craws, yard men or hostlers are on duty when and where the work is performed.

2. Yard crews, where employed, may be required to perform both road and yard service; and where switching limits are established yard crews may be required to perform service outside of such switching limits. When service is performed by a yard crew as provided herein, such work shall be paid for as part of the yard day or tour of duty and additional compensation shall not be paid for such work under either road or yard rules or regulations. The provisions of this paragraph 2 shall apply whether or not road crews are available when and where the work is performed.

3. When road crews perform switching or station work or handle the light engine or engines of their trains as provided in paragraph 1 of this rule, neither yard crews, yard men nor hostlers shall be entitled to any penalty pay or other compensation; nor shall road crews be entitled to any penalty pay or other compensation when yard crews perform road work or perform service beyond switching limits as provided in paragraph 2.

4. Management shall have the exclusive right to designate and change switching limits, and to establish and abolish yard and hostling service and yard and hostling service assignments.

5. All agreements, rules, regulations, interpretations and practices, however established, which conflict with the foregoing shall be eliminated, except that existing rules and practices considered by the carrier to be more favorable are preserved.

USE OF FIREMEN (HELPERS) ON OTHER THAN STEAM POWER

A. Eliminate all agreements, rules, regulations, interpretations and practices, however established, applicable to any class or grade of train, engine or yard service employees, which require the employment or use of firemen (helpers) on other than steam power in any class of freight service (including all mixed, miscellaneous and unclassified services) or in any class of yard service (including all transfer, belt line and miscellaneous services to which mileage rates do not apply).

B. Establish a rule to provide that

1. Management shall have the unrestricted right, under all circumstances, to determine when and if a fireman (helper) shall be used on other than steam power in all classes of freight service (including all mixed, miscellaneous and unclassified services) and in all classes of yard service (including all transfer, belt line and miscellaneous services to which mileage rates do not apply).

2. All agreements, rules, regulations, interpretations and practices, however established, which conflict with the provisions of paragraph 1 of this rule shall be eliminated.

CONSIST OF CREWS

Consist of Road and Yard Crews

A. Eliminate all agreements, rules, regulations and practices, however established, applicable to any class or grade of train, engine or yard service employees, which require the employment or use of

(i) a stipulated number of trainmen (assistant conductors, ticket collectors, baggagemen, brakemen or flagmen) or more than one conductor in any crew used in any class of road service, including all miscellaneous and unclassified services,

(ii) a stipulated number of brakemen or helpers or more than one conductor or foreman in any crew used in any class of yard, transfer or belt line service, including all miscellaneous services to which mileage rates do not apply, or

(iii) a conductor or trainman in connection with the movement of light engines or in pusher or helper service, or an engineer, conductor or trainman in pilot service.

B. Establish a rule to provide that

1. Management shall have the unrestricted right, under any and all circumstances, to determine when and if trainmen (assistant conductors, ticket collectors, baggagemen, brakemen and flagmen) shall be used in each crew employed in all classes of road service, including all miscellaneous and unclassified services, and if used the number and classification of employees who will be so used; and when and if brakemen or helpers shall be used in each crew employed (including yardmen who work independent of a yard crew) in all classes of yard, transfer and belt line service, including all miscellaneous services to which mileage rates do not apply, and if used, the number and classification of employees who will be so used.

2. Management shall also have the unrestricted right, under all circumstances, to determine when and if more than one conductor shall be used in any crew employed in any class of road service, including all miscellaneous and unclassified services; and when and if more than one conductor or foreman shall be used in any crew employed in any class of yard, transfer or belt line service, including all miscellaneous services to which mileage rates do not apply; and when and if a conductor, trainman or yardman will be used in connection with the movement of light engines and in helper and pusher service, and when and if an engineer, conductor, trainman or yardman will be used in pilot service.

3. All agreements, rules, regulations, interpretations and practices, however established, which conflict with the provisions of this rule shall be eliminated.

Manning Motor Cars and Self-Propelled Machines

A. Eliminate all agreements, rules, regulations, interpretations and practices, however established, which require the use of engine, train or yard service employees in any capacity on (or in connection with the operation or use of) any motor car or self-propelled roadway or shop equipment or machine used in maintenance, repair, construction or inspection work, whether operated on tracks or otherwise.

B. Establish a rule to provide that

1. Engine, train and yard service employees shall have no claim to man or to be called to work in any capacity on or in connection with the use or operation of inspection motor cars used by company officials, or motor cars operated with or without trailer cars and used by telegraph, telephone or company forces in the performance of maintenance, construction or inspection work, or self-propelled roadway or shop equipment or machines used in repair, construction or maintenance work, such as (this enumeration being by way of illustration and not by way of limitation) track motor cars operated with or without trailers, inspection motor cars, locomotive cranes, ditchers, clamshells, pile drivers, scarifiers, wrecking derricks, weed burners, rail detector cars, and all other self-propelled roadway and shop equipment and machines, whether operated on tracks or otherwise, or with or without cars.

2. Management shall have the unrestricted right, under all circumstances, to determine when and if engine, train and yard service employees shall be used on motor cars and self-propelled roadway and shop equipment and machines, as described in paragraph 1 of this rule; and to determine the number and classification of such employees when so used. If an engine, train or yard service employee is so used, he will be paid the rates and under the rules applicable to work train service; and in such case, each day such service is performed the time of the employee used shall be computed from the time he is required to report for duty until he is released from duty at the point where he is so relieved.

3. All agreements, rules, regulations, interpretations and practices, however established, which conflict with the provisions of this rule shall be eliminated.

Editors Afield

WHITE SULPHUR SPRINGS, W. VA.

Salary Science—The Elgin, Joliet & Eastern has installed a comprehensive salary administration program, embracing some 300 officers and supervisors in more than 100 positions. Using job descriptions, and a point system to determine the relative value of each position, the road has set up 15 classifications into which it can group all officers and supervisors on the railroad. Each job carries a maximum-minimum salary range. There are provisions, among other things, for periodic salary reviews; and the whole project is working smoothly after a better than two-year job of getting it ironed out.

E. G. Slocum, assistant to president on the "J", says he, and one associate, are able to handle the personnel side of the program without difficulty.

A similar program has been in effect on the Western Maryland for some time. That road uses six job groupings, but does not include general department heads (e.g., vice-presidents) in the program.

Y. R. Holman, the WM's director of personnel, says his road's setup is well fitted to the organization and, like Mr. Slocum, he indicates that a salary administration program can help management keep close tab on salary costs—in part to maintain proper relationships between jobs and, in some cases, to avoid disruptions which could arise from long tenure on a single job.

This matter of scientific salary administration—its philosophy and mechanics—was singled out for discussion at this year's meeting of the Railroad Personnel Development Group at the Greenbrier (Oct. 21-23). The approach is still new on most railroads; not too many actually have formal programs even now. Two that do, the Western Pacific and Pennsylvania, were represented on the personnel group panel. J. F. Tripician, manager of salary administration on the PRR, described his road's approach to the project, while I. M. Ferguson, assistant to president, WP, handled the job of panel chairman.

Better Supervisors—Few subjects around a railroad generate more discussion than that of improving supervision. Personnel officers are rightly concerned with it—and a good many railroads are beyond the "talk" stage in doing something about it.

A panel headed by J. I. Patin, PRR's director of personnel administration, tackled one facet of the problem at this year's meeting—how do you enhance the status of your first line supervision? It is agreed that this man's power has, in many respects, been eroded; he holds less power to punish and reward than he once did. Yet his duties and responsibilities have, if anything, expanded. So the problem is posed. This essential member of management's team must not only remain on the team but must be assured of his importance to it.

In this, as in many areas in which today's personnel officer must work, there are few clear-cut answers to go by. However, as Mr. Patin pointed out, you must be sure you seek substance and not shadow in dealing with the problem.

Several roads—Santa Fe, Southern Pacific, New York Central, to name three—have begun or enlarged supervisor training programs as one means to the end. As SP's educational consultant, Howard Brooks, put it, "You enhance a man's status any time you show him you are willing to invest money in him to help him to do his job better."

The Santa Fe has been sending 35 middle management people to a six-weeks course at USC for several summers; the SP, since 1951, has enrolled supervisors in a half dozen different colleges for courses ranging up to 12 weeks; the NYC has made extensive use of American Management Association courses. And some roads, Great Northern for one, has dipped into the future by underwriting scholarships for a selected group of sons of GN employees each year.

Changing Times—This personnel group, whose meetings border more nearly the seminar than a convention, is now about 10 years old. As recently as 1950 it was difficult to muster as many as a dozen officers whose assignments embraced what are now well-established staff functions on about 30 railroads. At this year's meeting there were 36 officers, representing 25 railroads and the Express Agency.

—Joe W. Kizzia

Nov. 5 Set as Final Date For 'Full Crew' Data

New York State's Public Service Commission has set Nov. 5 as the final date for submission of further written cross-rebuttal testimony from parties concerned with the current inquiry into the state's "full crew" laws. The commission has ordered open testimony closed after hearing rail management and brotherhood witnesses testify at five days of hearings in New York City and Albany (RA, Oct. 5, p. 34).

The commission is making its inquiry at the request of Governor Nelson Rockefeller in response to a report submitted to him earlier this year (RA, March 23, p. 9). So far, the PSC has received some 400 pages of carrier testimony charging that the laws are responsible for the employment of over 2,000 unnecessary employees—including firemen on most diesels, third brakemen, and some baggagemen—at a cost of $15,000,000 a year. The brotherhoods have so far submitted some 689 pages of rebuttal testimony.

The PSC will now review only written statements.

Supreme Court Chided Again For Taking Liability Cases

Justices of the U.S. Supreme Court have again chided the court's majority for continuing to review lower-court rulings in cases arising under the Federal Employers' Liability Act. The chiding came this time from Justices Harlan and Whittaker, and it served to recall a like statement which came in 1957 from Justice Frankfurter.

The Harlan-Whittaker statement was a dissent from an order whereby the court's majority summarily reversed the Ohio Supreme Court and thus restored a $25,000 jury verdict to a Pennsylvania employee who was injured while working as a member of a wreck-train crew. The case was docketed in the U.S. Supreme Court as No. 81, Henry J. Harris v. Pennsylvania Railroad.

The order noted that Justice Frankfurter would not have considered the case for reasons set forth in his 1957 statement. The Harlan-Whittaker dissent asserted that the present case was another of those involving issues of "no general importance," and which "have no legitimate demands upon our energies already taxed to the utmost."

A defense of the majority was embodied in a statement by Justice Douglas. He said: "The difference between the majority and minority in our treatment of FELA cases concerns the degree of vigilance we should exercise in safeguarding the jury trial."

3-way proven protection

FOR JOURNAL BOXES *with*

JBS

ACME LUBRICATORS

(AAR Conditionally Approved)

JBS Acme Journal Lubricators* alone have the exclusive batted 100% wool quilted core which retains four times its own weight in oil reserve. Heavy chenille loop surfaces of 30% wool and 70% cotton assure constant resiliency and an ample supply of filtered oil at all times even at a temperature of 45° below zero. The rectangular shape of JBS Acme Lubricators is particularly designed to insure snug fit and prevent displacement in the journal box. They require no modification of the standard journal box, and assure better performance with less servicing.

*Patented

AXLE-STOP DUST GUARDS

The installation of Axle-Stop Dust Guards as a combination dust guard and axle stop limits the free motion of the journal, wedge and brass upon impact and brake application. Instead of the brass and wedge taking the shock of impact, two steel inserts positioned in the Axle-Stop Dust Guard absorb the shock, prevent the cocking of the brass and definitely lessen the possibilities of a hot box. Bearing distortion is eliminated, permitting it to assume its full crown and attain a life which has never before been possible.

RECLAMATION SERVICE

Journal Box Servicing Corporation is a veteran of more than 30 years' experience in reclaiming car oils and waste. Today, its 17 plants, strategically located in 14 states, are performing the same highly efficient and economical function for lubricator pads, restoring them to their original usefulness at a small fraction of their original cost.

WRITE TODAY for descriptive folders.

GUARANTEED Quality, Workmanship and Material as represented.

Copyright 1950—Journal Box Servicing Corporation

PRI MEMBER

JOURNAL BOX SERVICING CORPORATION

"More than 30 Years in Car Lubrication"

SALES OFFICE: 332 S. MICHIGAN AVE., CHICAGO 4, ILLINOIS
GENERAL OFFICES: 1112 E. KESSLER BLVD., INDIANAPOLIS 20, INDIANA
FACTORY: DALTON, GEORGIA

REGIONAL SALES OFFICES:

ST. LOUIS, MISSOURI • CLEVELAND, OHIO
WASHINGTON, D. C. • KANSAS CITY, MISSOURI
SAN FRANCISCO, CALIF. • MONTREAL, QUEBEC

RRs ASK SIX RULES CHANGES *(Continued from page 9)*

by the rules proposals, "is absolutely vital to the railroads' future."

"Faced with the rapid expansion of competitors using government-built and tax-free highways, airports and waterways, the railroads are moving into a fight for their lives," Mr. Short declared.

"It is management's earnest hope," he continued, "that rail labor leaders will act in their own self-interest to help reach sensible agreements and end this waste which hits all railroad workers in reduced employment—as well as the general public in inflated prices and weakened railroad services."

Management's decision to launch the rules case came after President Eisenhower refused to appoint a special commission to investigate the impact of featherbedding on the public welfare. The request was made by AAR President Daniel P. Loomis for management after leaders of the operating unions refused to become parties to the proposal.

President Eisenhower said he felt that intervention by the White House would interfere with normal collective bargaining processes. The President went on to say his decision involved no expression of his opinion on the merits of the controversy.

From this assurance, Mr. Eisenhower went on to advise Mr. Loomis of his "earnest hope" that labor and management would exert "every effort through negotiations to settle the issues between them." The President's decision made it "imperative in the public interest that labor and management reach a solution themselves," Mr. Loomis said.

Some railroad executives were not too disappointed when events took that turn. They were fearful that an inquiry by a special Presidential board might be a lengthy proceeding.

Railway Labor Act procedures offer brighter prospects for early relief, these executives thought. While the act sets up no timetable, a case which is kept moving can cover the entire course from the filing of demands to issuance of an emergency board report in something like four months.

Management's preparations for this battle include arrangements for service-interruption insurance. In the event of a strike in violation of provisions of the Railway Labor Act, or in defiance of recommendations of a Presidential emergency board, the insurance will provide payments to railroads covering fixed expenses. AAR President Loomis has said this insurance "guards a railroad against financial collapse and therefore protects the nation against the loss of essential rail transportation services."

Rail labor leaders last week seemed reasonably sure what management's approach to the rules issue would be. But they weren't in any rush to serve their own rules notices. Indications now point to brotherhood action late in November—after the unions have had a chance to study management's demands fully and formulate their counterproposals accordingly.

The unions' immediate response to management's anti-featherbedding drive will apparently be aimed at (a) rank and file employees and (b) the public. Plans were taking shape last week for a "massive rally" scheduled for Thursday evening, Nov. 5, in Chicago. Between 4,000 and 5,000 railroad workers are expected to attend the affair.

Major addresses will be made by George Meany, AFL-CIO president; and George M. Harrison, president of the Brotherhood of Railway Clerks; and an AFL-CIO vice president. Chicago Mayor Daley and U. S. Senator Douglas of Illinois are also slated to speak. George E. Leighty, RLEA chairman and president of the Order of Railroad Telegraphers, will preside.

The rally, it's indicated, is the RLEA's way of answering the full-scale advertising campaign which the railroads have launched in an effort to acquaint the public with the current industry work-rules situation. Rail labor leaders, RLEA says, view the campaign as "deceitful . . . unwise . . . dangerous." And they warn of "evidence of strong employee resentment . . . (bringing) concern that the continuous vicious charges by management may create a situation where a strike becomes inevitable."

On the eve of the moratorium expiration, union opinion didn't wholly reflect the unity which labor leaders contend has been created among the organizations. Other indications, however, do point to close inter-organization cooperation while the rules controversy rages.

Some union officers were clinging to the theory that (a) rail management itself is not united on the industry approach to the dispute; and (b) management's campaign may drive the unions toward merger faster than labor, left to its own devices, might move.

Another brotherhood spokesman, however, saw no lack of unity among the carriers and forecast that the dispute will go the limit—to a possible strike next summer. "We believe the carriers are sincere in wanting a number of rules changes," he commented. "But we're not going to give up any rules . . . We expect it to be one of the roughest series of negotiations we've had."

One report hinted at new-found harmony among the operating unions regarding competition for bargaining rights—but the evidence pointed in the opposite direction. (In recent weeks the BRT won the contract for conductors on a major western road, the BLF&E retained a contract for engineers on an eastern property, and the BLF&E and BLE continued to contest representation of engineers on Canadian Pacific. The BLE holds the contract now, but may face a fight to retain it.)

HAYES Type WP is a cushion bumping post. The impact is absorbed by pushing ties in the ballast. The ties and ballast are disturbed but these are easily replaced. There is no damage to the post, the cars, track rails or lading. Hayes Track Appliance Co., Richmond, Indiana

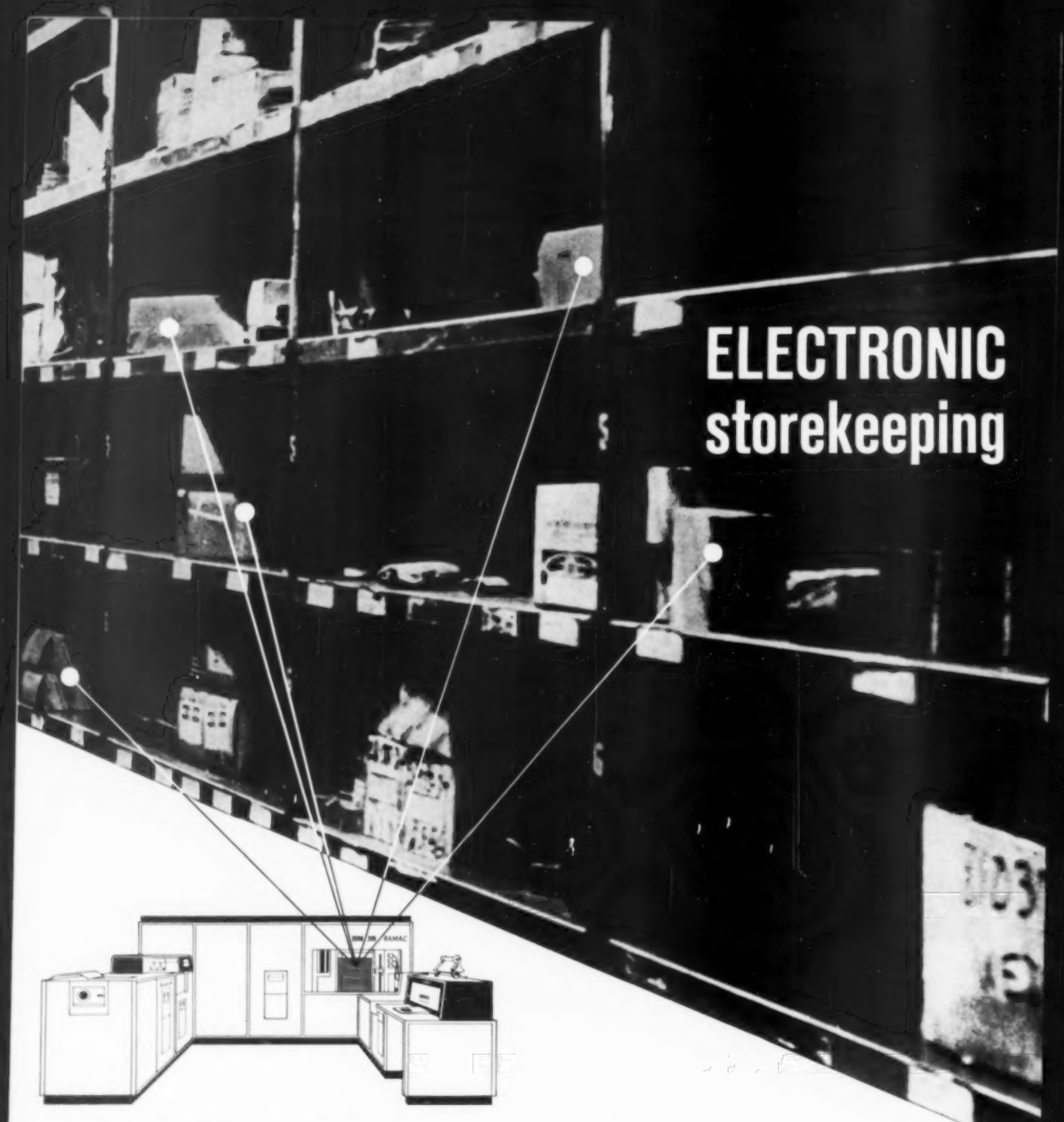
HELPING CANADA 'STRETCH HER MUSCLES'

Since 1945, more than 1,900 miles of new branch track have been laid by Canadian National Railways. CNR's steel highways thrust deep into Canada's rich timberland; they hug the sheer walls of giant open-pit mines; they pierce the magnificent Canadian Rockies in a race for the great Northwest Coast.

Canada's mighty industrial strength rides these rails. It comes out of the wilderness as logs and iron and oil, and much of it rides back in as tractors and pipelines and even whole new communities.

Canada's spectacular post-war growth is really the story of CNR's growth, too. CNR is the largest railway system in North America and the biggest freight carrier in Canada. It maintains nearly 35,000 miles of track, and operates a chain of first-class hotels from coast to coast. It owns Canadian National Telegraphs, which is linked to the world's major communications networks. CNR operates steamship services on both coasts and is one of the largest purchasers of Canadian industrial materials.

Canada already ranks fourth among the trading nations of the world. Her 17½ million people are proud of their land of opportunity and its rich heritage. And Canadian National Railways is proud to be helping her stretch her muscles.



ELECTRONIC storekeeping

with IBM RAMAC® 305

"Electronic Storekeeping" with the RAMAC 305 strikes at the heart of the inventory investment problem . . . making possible completely centralized control.

"**R**andom **A**ccess **M**ethod of **A**ccounting and **C**ontrol" means that the *instant* an issue, order, receipt, or transfer is processed, *all* affected account balances are updated—with electronic speed and accuracy.

The new Executive Inquiry Station allows management to get answers to vital questions on:

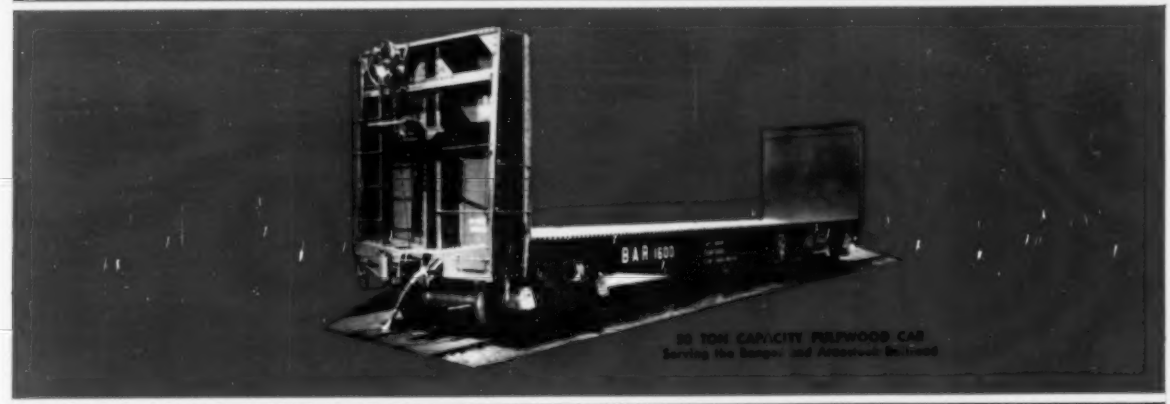
- vendor performance
- on-order commitments
- "how-much" and "where" of any inventory item
- comparison of expense to budget by item
- information on individual-part usage
- information on items which are in over or short supply.

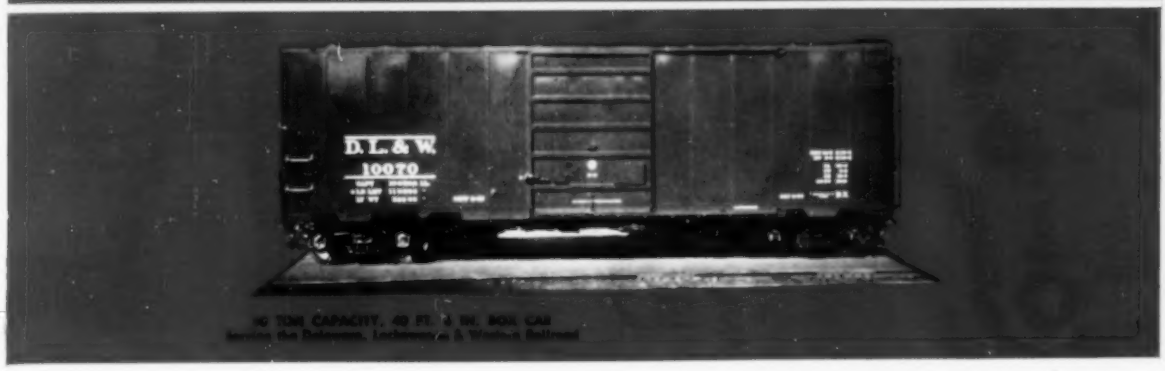
Ask your IBM representative for a demonstration today. Have him show you how "Electronic Storekeeping" gives you centralized control with the IBM RAMAC 305. Like all IBM data processing equipment, IBM 305 may be purchased or leased.

IBM® DATA PROCESSING

MAGOR
CARS

for dependable service... *Reduced maintenance*
Respected Products of more than
56 Years Experience

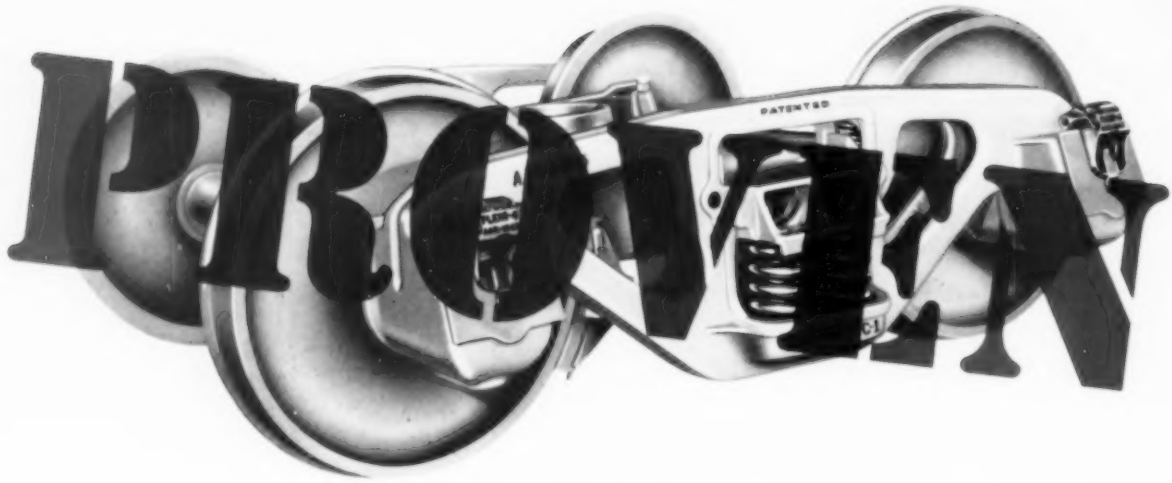




MAGOR

MAGOR
CAR CORPORATION

50 Church Street
New York 7, N.Y.



PROVEN

NATIONAL C-1 TRUCK

1st in longer wedge life
because it's
1st in friction control design

Because it was designed right — right from the start — today's National C-1 Truck is the proven freight car truck. It has proven itself in competitive ride tests ... proven itself in years of service ... proven to have the longest wedge wear life for lowest maintenance costs.

PROVEN

Wedge "rocks" on convex surface, causes slight polishing action in side frame column wedge pocket.

PROVEN

Correct hardness ratio between bolster wear plate and friction wedge gives longest life with superior riding qualities.

PROVEN

Design results in very little, if any, wear even after long service.

NATIONAL MALLEABLE and STEEL CASTINGS COMPANY

Established 1868

Canadian Sales Representatives
The Holden Co. Limited
Montreal Moncton
Toronto Winnipeg
Vancouver

MEMBER

Transportation Products Division
Cleveland 6, Ohio

International Division Headquarters
Cleveland 6, Ohio

CANADIAN SUBSIDIARY
National Malleable and Steel Castings Company of Canada, Ltd. Toronto 1, Ontario

COUPLERS • YOKES • DRAFT GEARS • FREIGHT TRUCKS • JOURNAL BOXES

MARKET OUTLOOK *at a glance*

Carloadings Rise 4.6% Above Previous Week's

Loadings of revenue freight in the week ended Oct. 24 totaled 607,347 cars, the Association of American Railroads announced on Oct. 29. This was an increase of 26,579 cars, or 4.6%, compared with the previous week; a decrease of 67,498 cars, or 10%, compared with the corresponding week last year; and a decrease of 96,341 cars, or 13.7%, compared with the equivalent 1957 week.

Loadings of revenue freight for the week ended Oct. 17 totaled 580,768 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, Oct. 17

District	1959	1958	1957
Eastern	86,110	96,546	108,648
Allegheny	83,148	116,428	136,535
Pocahontas	47,982	52,237	61,817
Southern	115,833	124,078	124,624
Northwestern	65,176	109,624	117,031
Central Western	131,982	141,026	126,875
Southwestern	50,037	56,464	51,282
Total Western Districts	247,695	307,114	295,188
Total All Roads	580,768	696,403	726,812
Commodities:			
Grain and grain products	55,249	69,682	51,260
Livestock	12,728	13,567	13,468
Coal	109,851	119,336	135,147
Coke	3,307	7,775	9,861
Forest Products	38,329	41,968	39,362
Ore	10,174	54,098	68,827
Merchandise l.c.l.	41,781	46,820	54,372
Miscellaneous	309,349	343,157	355,515
Oct. 17	580,768	696,403	726,812
Oct. 10	558,780	686,521	741,520
Oct. 3	572,502	677,625	747,647
Sept. 26	587,079	673,380	739,246
Sept. 19	578,240	667,760	724,924
Cumulative total, 42 weeks	25,016,861	24,226,626	29,352,217

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Oct. 17 totaled 8,848 cars, compared with 6,640 for the corresponding 1958 week. Loadings for 1959 up to Oct. 17 totaled 332,098 cars, compared with 214,849 for the corresponding period of 1958.

IN CANADA. — Carloadings for the seven-day period ended Oct. 14 totaled 74,955 cars, compared with 85,810 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
Oct. 14, 1959	74,955	27,551
Oct. 14, 1958	72,796	23,877
Cumulative Totals:		
Oct. 14, 1959	3,041,989	1,105,866
Oct. 14, 1958	2,971,219	1,110,045

New Equipment

LOCOMOTIVES

► *Missouri Pacific.*—Ordered 12 1,800-hp diesel units from Alco Products, Inc. Total cost of the order will be about $1,666,000 (trucks and traction motors will be salvaged from 12 existing 1,500-hp units which the new locomotives will replace).

PASSENGER-TRAIN CARS

► *Honduras National Railroad.*—Has invited bids for two self-propelled passenger rail cars. Specifications are available from Sr. Armando Bonilla Gastel, Jefe Administrative-FCN Apartado Postal No. 42, San Pedro Sula, Republic de Honduras.

Maintenance Expenditures

► *Up 1.3% in August.*—Expenditures by Class I roads for maintenance of equipment, way and structures in August 1959 were up about $3.2 million compared with the same month in 1958, according to report of ICC Bureau of Transport Economics and Statistics summarized below:

	August 1959	August 1958	% Change
Maintenance of Way & Structures	$102,253,550	$103,937,796	−1.6
Maintenance of Equipment	145,930,599	140,998,326	+3.5
Totals	248,184,149	244,936,122	+1.3

Purchases & Inventories

► *Seven Months' Purchases Up 27.3%.*—Purchases by domestic railroads of fuel, material and supplies in this year's first seven months were $200,891,000, or 27.3%, higher than in the comparable 1958 period. Purchase and inventory estimates in following tables were prepared by Railway Age.

*PURCHASES**

	July 1959	Seven Months 1959	Seven Months 1958
	(000)	(000)	(000)
Rail	$ 1,818	$ 54,501	$ 29,133
Crossties	5,866	31,101	23,069
Other Material	102,676	629,823	464,861
Fuel	28,950	220,599	218,070
Total	$139,310	$936,024	$735,133

*Subject to revision.

INVENTORIES†*

	July 1, 1959	July 1, 1958
	(000)	(000)
Rail	$ 70,173	$ 61,450
Crossties	74,295	90,461
Other Material	418,409	460,658
Scrap	25,344	24,238
Fuel	19,075	18,553
Total	$607,296	$655,360

*Subject to revision.
†All total inventory figures taken from ICC statement M-125 for month indicated.

McWILLIAMS PRODUCTION TAMPER

With split head design and positive penetration and compaction under the rail-bearing area of the tie, this provides highest quality tamping at speeds up to 800 feet per hour.

Track stays Up Longer with

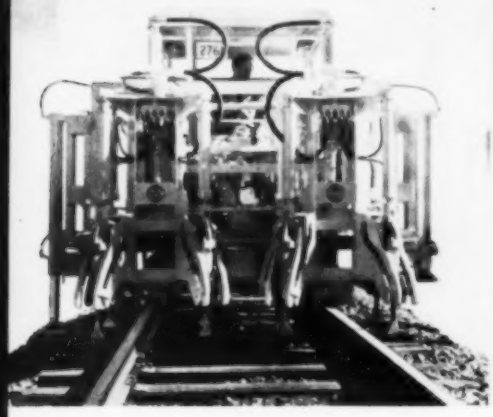
Track tamped with these units will extend the surfacing cycle by 30% or more over other machines in use—in all cases, providing the lowest tamping cost per year. *Write for new Tamper Bulletin T-600.*

McWILLIAMS JACK TAMPER

Speed and ballast compaction are sufficient to keep ahead of multiple tamping—with no need for over-raising.

McWILLIAMS SPOT TAMPER

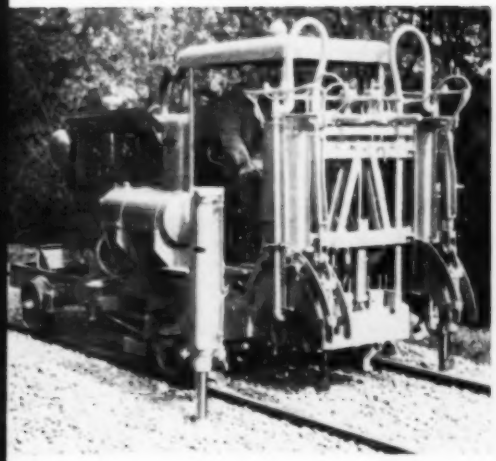
The most useful and the most widely used spot tamper, this fast, mobile machine delivers big-tamper ballast compaction.



McWILLIAMS MULTI-PURPOSE 8

The world's most versatile tamper, this intermediate machine is a production tamper . . . a spot tamper . . . a jack tamper.

a McWilliams Tamper



Trial and LEASE Plans

Railway Maintenance Corporation

PITTSBURGH 30, PA.

WE NEED 3 MORE GOOD MEN AT FARR COMPANY

We need three more good men to serve our most important customers—the growing American Railroads. These men will work out of New York, Chicago, and Los Angeles.

They will sell the expanding line of new products—as well as air filtration equipment that has become the standard of the American Railroad.

They must have good sales records—5 years in the railway supply field, preferably in motive power and allied equipment.

They must be willing to work hard, accept increasing responsibility.

As Farr Company continues to grow, these men will grow with us. Those who are interested—and can qualify—are invited to send complete resumés to:

G. F. Thruelsen, General Sales Manager, Farr Company—P.O. Box 90187, Airport Station—Los Angeles 45, Calif.

Miles B. Crowley
GN

Clayton J. McPhail
New Haven

Frank E. Moran, Jr.
New Haven

Leroy J. Stift
New Haven

People in the News

GREAT NORTHERN.—**Miles B. Crowley,** superintendent of motive power, St. Paul, Minn., appointed chief mechanical officer there, effective Nov. 1, to replace **J. H. Heron,** who resigned to accept a position with the **New York Central** (RA, Oct. 19, p. 39). **J. G. German,** assistant to the chief mechanical officer, named to succeed Mr. Crowley. **D. F. Marston,** mechanical engineer, succeeds Mr. German. **R. E. Johnson,** master mechanic, Great Falls, Mont., replaces Mr. Marston at St. Paul.

LACKAWANNA.—**C. R. Hartshorn,** western traffic manager, Chicago, retired Oct. 31.

NEW HAVEN.—**Clayton J. McPhail,** assistant to vice president—operations at New Haven since August, appointed general superintendent of transportation. **Frank E. Moran, Jr.,** superintendent of freight terminals, New Haven, appointed superintendent, New Haven division. **Leroy J. Stift,** trainmaster, named superintendent, New Haven freight terminals. **Fred B. Uhrbrock,** trainmaster, New London, Conn., transferred to New Haven. **R. J. Manley** appointed trainmaster at Cedar Hill, Conn.

SOO LINE.—**H. K. Willson,** general agent, Pittsburgh, appointed assistant traffic manager—sales, Minneapolis, to succeed **George B. Shimek,** appointed to the newly created position of assistant freight traffic manager—sales there. **G. A. Johnstone,** general agent, Cleveland, named to replace Mr. Willson, and in turn is succeeded by **A. K. Miller,** commercial agent. **D. T. Walen,** general agent, Chicago, named assistant traffic manager—sales there. **Ed N. Phelps,** administrative assistant—traffic, Minneapolis, retired Oct. 31.

SOUTHERN PACIFIC.—**E. A. McDowell** appointed assistant to the president, San Francisco, succeeding **Theodore Wright,** who retired Oct. 31. **J. C. Jaspar** and **H. A. Waterman** named assistant secretaries.

J. H. Long, superintendent, Rio Grande division, El Paso, Tex., transferred to the Sacramento division, Sacramento, Cal., to replace the late **V. E. Anderson. D. K. McNear** named to succeed Mr. Long.

OBITUARY

Henry H. Brigham, Jr., 50, vice president, **North American Car Corp.,** San Francisco, died Oct. 24 in that city.

Charles W. Dooling, 68, vice president—consultant, **Western Pacific,** San Francisco, died Oct. 21 at Redwood City, Cal.

Vernon T. Johnston, 65, executive general agent, **Illinois Central,** Jackson, Miss., died Oct. 17 in that city.

Manuel J. Macias, former superintendent of motive power of the **National Railways of Mexico,** died Oct. 18 at that railway's hospital in Mexico City. When he retired several years ago, Mr. Macias was purchasing agent for Ferrocarril del Pacifico at Guadalajara, Jal.

WANTED
RAILWAY SIGNAL SYSTEM CIRCUIT DESIGNERS AND DETAILERS

Opportunities for men in Circuit Design and detailed positions at various levels. Some Railroad experience desirable. Minimum requirements: High School education with at least four years' experience, or higher technical education with some experience. Salary commensurate with education and experience. Many company benefits. Send resume to Box #901, RAILWAY AGE, 30 Church St., New York 7, N. Y.

To provide relaying rail 'FASTER from FOSTER'

We'll inspect and purchase "as is" all sizes, plus tie-plates and angle bars, in track or in storage wherever they are. *For prompt inspection and bid, call*

L.B. FOSTER Co.
PITTSBURGH • NEW YORK • CHICAGO
HOUSTON • LOS ANGELES • ATLANTA

STATEMENT required by the act of August 24, 1912, as amended by the acts of March 3, 1933, and July 2, 1946 (Title 39, United States Code, Section 233) showing the ownership, management, and circulation of Railway Age, published weekly at Orange, Connecticut for November 2, 1959.

1. The names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, Robert G. Lewis, 30 Church St., New York 7, N. Y.

Editor, James G. Lyne, 30 Church St., New York 7, N. Y.

Executive Editor, Joe W. Kizzia, 30 Church St., New York 7, N. Y.

Managing Editor, Fred C. Miles, 30 Church St., New York 7, N. Y.

2. The owners are: Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N. Y. Stockholders of one per cent or more, James G. and Louise Lyne, 30 Church St., New York 7, N. Y., Arthur J. McGinnis, 30 Church St., New York 7, N. Y., Frederick A. and Artimese B. Clark, 20 Ellis Drive, Basking Ridge, N. J., Joseph or Katherine Sanders, 2909 Maple Ave., Dallas 4, Texas, John R. Thompson and Kathe Thompson, 79 West Monroe St., Chicago 3, Ill., Ruth Wheaton Johnson, 1615 Ravenna Blvd., Seattle 5, Wash., Mrs. E. S. Fenton, c/o Russell & Russell, 41 East 42nd St., New York 17, N. Y., J. Streicher & Co., 2 Rector St., New York, N. Y., Partners of J. Streicher & Co. are: Joseph Streicher, Jack L. Streicher, Ethel Streicher, Judson Streicher, all of 2 Rector St., New York, N. Y., Morton & Co., c/o Marine Midland Trust Co., 120 Broadway, New York 15, N. Y.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) none.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

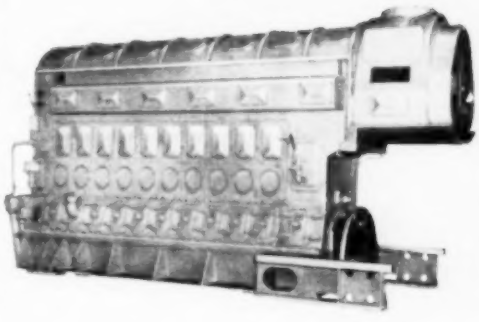
5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.) 15,203.

ROBERT G. LEWIS,
(Publisher)

Sworn to and subscribed before me this 28th day of September, 1959.

AGNES L. ASHTON,
[SEAL] (My commission expires March 30, 1961)

To get the best, use F-M factory experience and facilities for O-P engine service.



Upgrade your diesel power—cut costs on maintenance, shop facilities and inventories...

Specify Factory Warranted

F-M Unit Exchange

Meet increased tonnage demands with up-to-the-minute improvements in design and engineering: Upgrade your motive power fleet with Fairbanks-Morse Unit Exchange O-P engines!

F-M Opposed-Piston diesels are rebuilt to exacting factory specifications and are Warranted just as new equipment. You get full advantage of latest developments in diesel power for maximum performance. A 60% increase in F-M Unit Exchange component availability assures prompt delivery—for every O-P rating and major accessory group.

Remember: The only engine better than your present O-P is an Opposed-Piston diesel made better by Fairbanks-Morse. For full details and delivery schedules, write Fairbanks, Morse & Co., 600 South Michigan Avenue, Chicago 5, Illinois.

FAIRBANKS-MORSE

a name worth remembering when you want the BEST

LOCOMOTIVES • DIESEL, DUAL FUEL AND GAS ENGINES • GENERATORS • SCALES
ELECTRIC MOTORS • PUMPS • COMPRESSORS • MAGNETOS • HOME WATER SYSTEMS

You Ought To Know...

Volume rates should not be published "indiscriminately," but they can be a "potent weapon to meet special competitive situations," N&W Assistant Vice President Charles P. Blair (coal traffic department), told the 22nd Annual Joint Solid Fuels Conference in Cincinnati last week. He noted that N&W was involved in two recent cases in which the ICC approved reduced volume rates on coal. He said the carload will remain the basis for most rail rates on coal, but "when the occasion arises, the N&W is ready and willing to take such rate action as is necessary to move the traffic."

Crop conditions are a more significant factor than the steel strike in cutting rail traffic in some areas. Severe drought and consequent lighter grain loadings cost the Milwaukee $1,450,000 in revenues during September. Revenue losses attributable to the steel strike totaled $870,000.

Six railroad employees were killed on duty and 1,152 injured in August, compared with 16 deaths and 1,153 injuries in August 1958. No passengers were killed, but 129 were injured, in August train and train-service accidents. That compared with four passenger fatalities and 181 injuries in August 1958.

Eleven standard pallet sizes—eight rectangular and three square—are proposed in American Standards Association publication MH1.1-1959. General acceptance of these standards would, ASA says, "help solve a materials handling problem that has plagued just about every industry that uses lift trucks." Copies of the new standard are available from ASA, 70 East 45th st., New York 17, at $2 per copy.

Proposed limousine service between Washington and New York has been disapproved by the ICC. The service was proposed by D. C. Transit, which operates Washington's bus and streetcar system. It would have operated between Washington's National Airport and New York's International Airport, with service also to the two cities and to LaGuardia Airport. The Commission's adverse decision was based on its finding that Transit had failed to show public demand or need for the service.

Entries are being received for the ninth annual "Golden Spike" advertising competition sponsored by the Association of Railroad Advertising Managers. All types of ads which in any way use a railroad theme, except those of railroads themselves, are eligible. Entry blanks can be obtained from the Chairman of the Awards Committee, Albert L. Kohn, General Advertising Manager, Southern Pacific Co., 65 Market St., San Francisco 5, Calif. Deadline is Jan. 15, 1960.

Pullman-Standard, with an order backlog of several hundred piggyback cars for Trailer Train Co., is publicizing the latest addition to its line of standardized freight cars—the 85-ft PS-4PB piggyback flat. A new brochure describes the car, which was unveiled at the recent mechanical show in Chicago. Over 1,400 units, Pullman says, have been placed in service or are currently on order.

Indiana's "excess crew" laws cost the railroads "an unjustified $6,000,000 a year," Pennsylvania Chairman James M. Symes told civic and business leaders in Richmond, Ind. "This extortion is made in the name of safety—despite the proved fact that it has nothing to do with safety at all," said Mr. Symes.

Composite aluminum-steel covered hopper cars ordered by the Southern are rolling off Magor Car Corp.'s assembly line. Southern has ordered 455 of the 100-ton cars at a cost of $10,000,000 (RA, July 13, p. 41). In addition to pioneering the use of aluminum in covered hoppers (Magor has bought over 6,500,000 lb of the metal for the order), these new cars will have the highest individual load capacities ever provided in cars of this type. Cubic capacities will range from 2,600 cu ft to 4,605 cu ft for handling materials of varying densities.

Painstaking analysis of the passenger market and imaginative passenger promotion have paid off for the Burlington. According to General Passenger Traffic Manager J. J. Alms, the Q is the only western line where gross passenger revenues have held steady over the years 1952-58 (Burlington's gross increased 0.6% compared to decreases ranging up to 39% for other western roads). Moreover, Burlington's share of the western passenger market went from 6.6% in 1952 to 9.23% last year.

Lubricator Installations: Up 10%

AAR Mechanical Division semi-annual survey shows that lubricators were installed in 208,721 cars during the first half of 1959.

	No. of Cars Equipped		Percent of Ownership	
	Dec. '58	June '59	Dec. '58	June '59
Railroads	552,038	725,258	30.6	40.3
Privately Owned	41,878	77,379	15.1	27.9
Total	593,916	802,637	28.6	38.6

Advertisers' Index

Algoma Central & Hudson Bay Railway Company 61
American Brake Shoe Company 31

Bendix Radio Division 34
Bethlehem Steel Company 3
Budd Company 24-25
Buffalo Brake Beam Company 12
Byers Company, A. M. 44, 45

*Canadian Bronze Company, Ltd. 14H
Canadian National Railway 51
Canadian Pacific Railway Co. 29
Caterpillar Tractor Company 8

*Davidson & Co., Ltd., W. K. 14C

Fairbanks, Morse & Company 59
Farr Company 58
Foster Company, L. B. 58

General Railway Signal Company .... Back Cover
General Steel Castings Corp. 11
Griffin Wheel Company 37

Hayes Track Appliance Company 56
Hunt Company, Robert W. 61

International Business Machines Corp. 52
Iron & Steel Products, Inc. 61

Journal Box Servicing Corp. 49

Magor Car Corp. 53
Miner Inc., W. H. 6
*Montreal Locomotive Works, Limited 14D
Motorola Communications & Electronics, Inc. 23

National Malleable & Steel Castings Company 54
*National Steel Car Company, Ltd. 14A

Portland Cement Association 14

Railway Maintenance Corp. 56-57

Statement of ownership 59
Striegel Supply & Equipment Corp. 61
Symington-Gould Company .... Inside Back Cover

Texaco, Inc. .... Inside Front Cover

*Union Railway Equipment Company 14C
Union Switch & Signal, Division of Westinghouse Air Brake Company 4

Wellman Engineering Company 15
Westinghouse Air Brake Company 32-33

* *For Canadian and Foreign distribution only.*

CLASSIFIED ADVERTISEMENTS

FOR SALE
railway equipment
Used—As Is—Reconditioned

Special Offerings
3-Diesel-Electric Locomotives 44-Ton General Electric
ICC Operating Condition—Standard Gauge

RAILROAD TRACK SCALE
1—125-Ton, 52'6", Buffalo Scale Co.

Service-Tested
Freight Car Repair Parts
For All Types of Cars

Railway Tank Cars and Storage Tanks
6,000- 8,000- and 10,000-gallon
Cleaned and Tested

IRON & STEEL PRODUCTS, INC.
"ANYTHING containing IRON or STEEL"
General Office: 13486 So. Brainard Ave., Chicago 33, Illinois, Phone: Mitchell 6-1212
New York Office: Room 1608, 51C East 42nd St., New York 17, New York, Phone: YUkon 6-4766

Robert W. Hunt Company
ENGINEERS
Inspection—Tests—Consultation
All Railway Equipment
General Offices:
810 S. Clinton Street
CHICAGO 7
All Principal Cities

FOR SALE
Baldwin Diesel Electric 120 Ton, 1000 H.P. Switcher. Rebuilt 1955 less than 2000 hrs. since rebuilt. Bargain Price. STRIEGEL SUP. PLY & EQUIPMENT CORP., 507 Jack Street, Baltimore 25, Maryland. Phone ELGIN 5-7922.

KEEP BUYING U.S. SAVING BONDS

POSITION WANTED
Well established, aggressive West Coast Railway Sales Representative, Mechanical Engineer, is available for additional representation with both railroad and industrial plants in Northern California Area. Box #906, RAILWAY AGE, 30 Church Street, New York 7, N. Y.

the road that service built.

the provides a seaway link at Sault Ste. Marie and Michipicoten with the only rail-serviced docks at these ports.

in addition the operates a fleet of bulk lake freighters.

fast reliable diesel powered trains keep the transportation system abreast with the times.

for industrial sites and timber rights contact the

also provides information regarding sportsmen's wilderness vacations, fishing, hunting and canoeing.

a complete mining department is another extra service provided by the head offices at Sault Ste. Marie, Ontario.

Canada's Railways—World Leaders

The railways of Canada are receiving special attention in this issue—and we venture the opinion that these railways (especially the two big ones, Canadian Pacific and Canadian National) occupy a unique position of leadership among the world's railroads.

This observation is in no way derogatory to the U.S. railroads, nor those of any other large country. In technological advancement and efficiency of performance the U.S. railroads have lost none of their luster—but our railroads, south of the border, have been picked upon politically more grievously than the railroads of any other leading country.

•

Our Canadian brethren will hasten to remind us that they enjoy no immunity, either, from political interference—and they will be correct. But Canada has a much less rigorous railway regulatory law than the United States does. South of the border, railroads find it practically impossible to engage freely in truck, water and air transportation. No restriction like this exists in Canada. Indeed, Canadian Pacific has Canada's largest fleet of for-hire trucks, and it is a big operator on the oceans and in the air. The railways of our good northern neighbor have their political problems—especially that of some statutory limitations on rates, but these are now under investigation by a Royal Commission; and, in Canada, recommendations of such commissions often lead to action. It will be recalled that it was a Royal Commission report that resolved the "fireman off" controversy for them. In the U.S., by contrast, President Eisenhower refused to appoint a similar commission to study and report upon a parallel issue.

In the United States we have three powerful and well-heeled government bureaus which have the exclusive assignment of promoting air, inland waterway, and highway transportation—with no official consideration whatever for railway welfare and progress. There are in Canada no counterparts to these three anti-railroad promotional programs. Nowhere in the world are railways free from political burdens—but those which Canada lays on its railways, while considerable, appear to be a lot less than those railroads south of the border have to bear.

The position of the Canadian Pacific—in having to meet the competition of the government-owned Canadian National—certainly has no exact parallel south of the border. On the other hand, the problem posed here is substantially duplicated (or worse) by that of almost every large U.S. railroad—which is either paralleled by a super-duper, high-speed highway or a toll-free waterway, or both. As government enterprises go, the Canadian National has a set-up more nearly duplicating that of private enterprise than any other government-owned enterprise in the world.

We'd be fortunate south of the border, if only our government-owned companies (such as the TVA and other such "authorities") were organized the way the Canadian National is.

In short, when circumstances cause an economic enterprise to fall into government ownership, Canada is undeniably the world's leader in finding a form of organization most closely paralleling that of private business.

In their relatively favorable political environment, the Canadian railways have done their best to apply improved technological and managerial techniques. In their research into costs and other economic problems, probably no railroads on the continent are more strongly staffed. In their dealings with organized labor, they have been fair and firm—certainly no less so than the U.S. railroads. Both the large railways have been outstandingly skilfull and successful in their handling of public relations.

•

Canada is an independent nation, and justly proud of it. From the standpoint of professional railway management, however, the international boundary has been no barrier. It is traversed with frequency and ease. Canada's railways have important lines in the U.S. and the U.S. railways have vital extensions into Canadian territory. There are no railroaders anywhere in the world better qualified to speak and act as exponents of railroad progress—in the realm of public policy as well as in technology—than Canadian railroaders are. They are, perhaps, somewhat more modest than they should be. They are, in fact, right in the middle of the big league—on a world-wide plane.

FOR

DEPENDABLE OPERATION

WITH

INCREASED SERVICE LIFE...

specify

Symington®

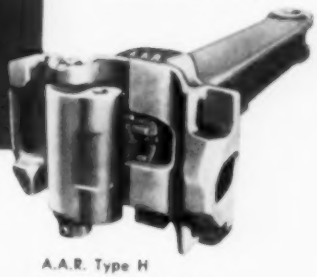
RAILWAY EQUIPMENT PRODUCTS

Truck Spring Snubber

A.A.R. Standard E Coupler with Alternate Standard Swivel Shank E-61A-HT

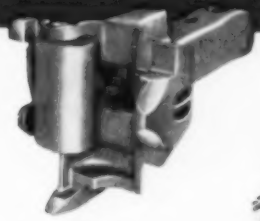
Radial Connection Y-25-A

Rubber Type Resilient Side Bearing

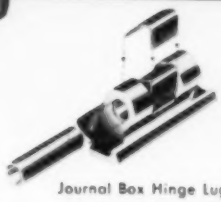


A.A.R. Type H Tightlock Coupler H-80

Composite Articulated Journal Box Lid



A.A.R. Type F Interlocking Coupler F-70



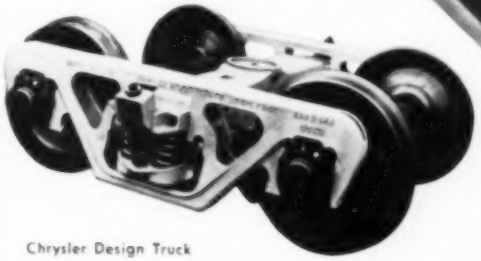
Journal Box Hinge Lug Wear Plate and Self-Adjusting Bushing

A.A.R. Alternate Standard Vertical Plane Swivel Yoke Y-30

Striking Casting and Center Filler— 3 Piece Design Welded and Stress-Relieved

Yoke Y-65 Standard Pocket for Twin Cushion Draft Gear Application

Long Travel Snubber for Locomotives and Passenger Cars



Chrysler Design Truck

Yoke Y-50 Standard Pocket for Conventional Draft Gear Application

Truck Pedestal

THE *Symington-Gould Company*

DIVISION OF SYMINGTON WAYNE CORPORATION

LEADER IN PROGRESS

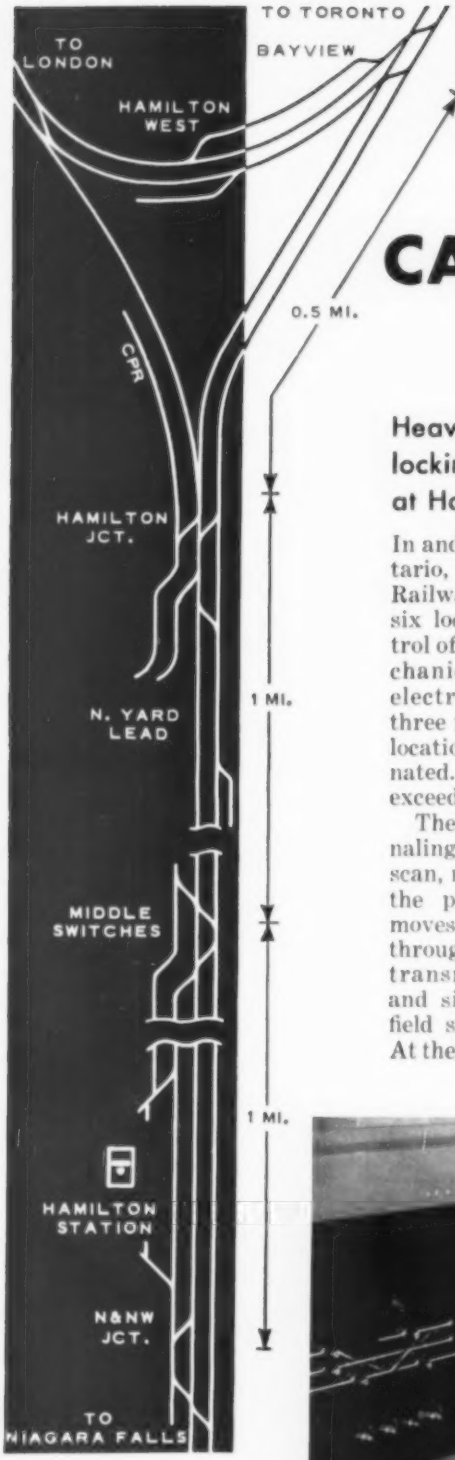
R P I

REPUTE

WORKS: DEPEW, NEW YORK

NEW YORK • CHICAGO • BOSTON • PHILADELPHIA • SAN FRANCISCO • ST. LOUIS

IN CANADA: ADAMS SUPPLIES, LTD., MONTREAL, QUEBEC



ELECTRONIC SIGNALING

ON THE

CANADIAN NATIONAL RAILWAYS

Heavy traffic interlockings consolidated at Hamilton

In and around Hamilton, Ontario, the Canadian National Railways have consolidated six locations under the control of one operator. Two mechanical interlockings, an electric interlocking, and three former hand-switching locations have been eliminated. Anticipated savings exceed $44,000 annually.

The latest electronic signaling system, GRS Syncroscan, makes it easy to handle the present traffic of 614 moves a day, including 89 through trains. Syncroscan® transmits complete switch and signal controls for any field station in 1½ seconds. At the same time, Syncroscan receives indications of field conditions at the rate of 100 per second.

The Canadian National Railways are already expanding this installation, adding control of three more locations. The great speed and capacity of Syncroscan make such additions entirely practical.

You can use Syncroscan to cut costs on your road. For both interlockings and cTc, Syncroscan permits economic centralization of control on a scale never before feasible.

GENERAL RAILWAY SIGNAL COMPANY

ROCHESTER 2, NEW YORK

NEW YORK 17 CHICAGO 1 ST. LOUIS 1 2996

CANADIAN NATIONAL RAILWAYS